THE

MEDICAL BULLETIN:

A MONTHLY JOURNAL OF

MEDICINE AND SURGERY.

VOL. X. PHILADELPHIA, APRIL, 1888. No. 4.

ORIGINAL COMMUNICATIONS.

ON THE SWEDISH MOVEMENT AND MASSAGE TREATMENT.

BY HARTWIG NISSEN,

Director of the Swedish Health Institution, Washington, D. C.; Instructor of Gymnastics at Johns Hopkins University, Baltimore.

GENTLEMEN:—I am here to-night to tell you a little of what I know about "The Swedish Movement and Massage Treatment," and, if some things should seem strange, or you should think that I have claimed rather much for it, I beg you to remember that all what I have to say is based upon facts, and that I am here not as a special agent for myself, but as one who wants to lay before you a clear and true representation of what has been done.

It is a known fact that bodily exercise was used as a curative agent in the earliest days.

Æsculapius, Apollo's descendant, is said to have been the first inventor of the art of gymnastics. Medea procured health and youth by gymnastics.

It was 400 to 500 years before Christ that Iccus and later Herodicus reduced bodily exercise to a system; and Herodicus made it a branch of medical science to preserve the health and cure disease by the use of gymnastics.

Hippocrates was his pupil, although he did not agree with his master in all his gymnastical applications.

Diocles, Praxagoras, Herophilus, Asclepiades, Athenæus, Celsus and Galen recommended "Movement Treatment" and gave rules for it.

Mercurialis wrote in the sixteenth century a book, "De Arte Gymnastica," or the science of bodily exercise, which he divided into "gymnastics for athletes, for the military and for the cure of diseases." He gave special attention to the last one, as it was used by the Greeks and Romans, and pointed out the use of the different movements in different diseases, and gave rules for their application in special cases.

Thomas Fuller, an English physician, published in 1704 "Medicina Gymnastica," or a treatise on the power of exercise in preserving health and curing disease.

Clement J. Tissoet, a French physician, who several times gained the prize of the Academie Royale de Chirurgie for his lectures, published in Paris, 1781, "Gymnastique Médicinale."

Gutsmuths, Jahn, Clias, and Spiess worked with energy to spread the German gymnastics or "Turnkunst," but they did not pay any attention to gymnastics as used for the treatment of diseases.

As Herodicus observed the curative effects of gymnastics on his own delicate health and thereby was brought to use movements in therapy, so did the Swede, Pehr Henrik Ling, in the beginning of this century, study the movement treatment, because he had cured himself of rheumatism in the arm by gentle percussions.

Ling had been a fencing-master and instructor of gymnastics, but now he studied anatomy and physiology and the influence of the different movements and manipulations in different chronic diseases.

He brought gymnastics into a system corresponding with the knowledge of physiology; and this is the reason why it is called "The Ling System," or the "Swedish Movement Treatment."

By ardent study and labor Ling succeeded at last in making his new ideas recognized, and in 1813 the first "College for Pædagogical, Military and Medical Gymnastics," called the "Kongl. Gymnastiska Central Institutet," was established in Stockholm at the expense of the Swedish Government.

The principal studies for graduation are: Anatomy, Physiology, Pathology, Hygiene, Diagnosis, Principles of the Movement Treatment, and the Use of Exercises for General and Local Development.

Ling died in 1839. His pupils, Brandting, Georgii, Liedbäck and G. Indebeton, published Ling's theories. Hereby, and on account of the many foreigners who studied at the Central Institute of Stockholm, Ling's art soon became known in a great part of the world.

Dr. Joseph Schreiber, of Vienna (in his "Manual of Massage and Muscle Exercise," p. 21), says: "The most powerful impetus, however, given to the revival of mechano-therapy originated with a Swede, the creator of the modern 'Movement Cure,' whose doctrines spreading to England and to Germany, have after many decades, and in spite of being marked by some extravagancies, gained universal recognition."

Dr. Ron, in St. Petersburg; Georgii, Indebeton, Bishop and Roth, in London; Rothstein and Neumann, in Berlin; Richter, in Dresden; Schreber, in Leipzig; Melicher, in Vienna; Eulenburg, in Baden; Laisné, at the "hôpital des Enfants-Malades," in Paris; Taylor, in New York, and many others, established special institutions for movement treatment, and published their results partly in medical papers, partly in books.

Endowed with depth of thought as well as creative genius, fortified by scientific information, and sustained by an untiring devotion to his task, Ling was early led from result to result by a careful classification of movements: and by a scientific examination of their different results. Ling distinguished in the first instance between active and passive movements; active movements being such as the subject performs entirely by voluntary muscular contraction; and passive movements such as the subject takes no part in beyond allowing the operator to move the whole or any portion of his body, as flexion, extension, and rotation, and to manipulate it as in stroking, kneading, pressing, percussion, etc.

These simple movements Ling combines into resistive or duplex movements, viz., active-passive, or "concentric duplex" movement, such as the operator resists, and passive-active, or "excentric duplex" movements, such as the operator overcomes when the patient resists.

Duplex, because two individuals engage in it; concentric, because the patient's muscles have to overcome a resistance which prevents flexion—a movement toward the trunk; excentric, because the force acts in a direction away from the body.

These movements cause an increased flow of blood to the muscle and soft parts, increasing thereby the circulation and removing accumulation of tissue waste. They cause resorption of exudations, transudations and infiltrations, and a separation of adhesions in tendon sheaths and in joints. They increase the oxidizing powers of the blood. They relieve the congestion of the brain, lungs, intestines, uterus, liver, and kidneys, by increasing the flow of blood to the muscles. They stimulate directly the sympathetic nervous system, thus increasing secretion, and reflexly the activity of unstripped muscle fibre, and so relieve various functional derangements. And they educate morbidly affected muscles, to convert abnormal into normal actions, and to suppress useless movements.

Dr. J. Schreiber, in his book (page 67), says: "We understand by passive movements all movements performed by the physician upon the patient, the latter remaining passive. The following results are obtained:—

"1. Extravasations occurring about dislocated joints are, by pressing and rubbing the tendons and ligaments in which they are imbedded, finally liquefied, and thus more quickly absorbed.

"2. In stiffness of joints the contracted muscles and tendons are forcibly but gradually elongated, and any existing exudations or vegetations within the joints are disintegrated and absorbed.

"3. By the forcible stretching of the muscles their nerves are likewise stretched; molecular changes being thus set up in both.

"4. Forced extension of the muscles causes pressure on their blood and lymphatic vessels, thus accelerating the circulation.

"5. Finally, such muscles as have by rheumatic or neuralgic pains been kept in a state of inactivity, have some of their much needed

exercise restored to them. Passive movements thus form in certain diseases, as in neuralgia and rheumatism, the introduction, as it were, for the more painful active motions which have to follow."

Dr. J. Graham ("Treatise on Massage," says: "In 1844 the Supreme Medical Board of Russia appointed two members of the Medical Council to inquire into the merits of movement and manipulation treatment as practised by M. de Ron, one of Ling's disciples at St. Petersburg, who had been using it then for a period of twelve years. From the highly commendatory report of the councillors we quote the following: 'All passive movements, or those which are executed by an external agent upon the patient, as well as active ones produced by the effort of the voluntary muscles, and the different positions with the aid of the apparatus or without it, are practiced according to a strictly defined method, and conducted rationally, since they are based upon mechanical as well as anatomical principles.

"'Experience teaches us the usefulness of the institution, as many patients thus treated have recovered their health after having suffered from disease which could not be cured by other remedies.'"

Before speaking about more details of this system, I must say a few words about what is meant by the word "Massage." Dr. J. Graham says: "Massage—to knead or handle—is a term now generally accepted by European and American physicians to signify a group of procedures which are usually done with the hand, such as kneading, manipulating, rolling, and percussion of the external tissues of the body in a variety of ways, either with a curative, palliative, or hygienic object in view. Its application should in many instances be combined with passive, resistive or assistive movements, and these are often spoken of as the Swedish movement cure. There is, however, an increasing tendency on the part of scientific men to have the word massage embrace all these varied forms of manual therapeutics, for the reason that the word 'cure' attached to any form of treatment whatsoever, cannot always be applicable, inasmuch as there are many maladies that preclude the possibility of recovery and yet admit of amelioration."

In this I cannot fully agree with the author. Massage means kneading, and when we go so far as to say that massage means the handling and manipulation of the flesh as in kneading, pressing, stroking, tapping, etc., I think we have embraced all that can come in under this term. To say that a passive movement such as flexion and extension, or even a duplex movement is massage or kneading, is too much to say, and has been a source of great harm both to patients and to the original Swedish system, as I shall have occasion to show later on.

"Scientific men will use the word massage to avoid the word cure." If these men had read a little about Ling's system they would not have found the word cure, as Ling called it, "Sjuk-gymnastik," that is, "gymnastics for invalids," or better, "the treatment of diseases by movements," which also embraces the different manipulations now grouped under the term massage.

Rossback ("Lehrbuch der physikalishen Heilmethoden," Berlin, 1882) calls it, "Gymnastics and Massage." Schreiber's term is "Mechano-Therapy."

Rothstein, Neumann, Eulenburg and others call it, "The Swedish Health Gymnastics," but very few take to the term "massage," to both manipulations and active and passive movements. It is true that we frequently see "movement cure" on circulars and in some books, but the term is used partly on account of lack of knowledge and partly on account of fraud.

I should think that the most correct and all-embracing term would be, "Swedish Movement and Massage Treatment."

Massage embraces the processes of kneading, pressing, stroking, rubbing, tapping, hacking, and percussing when applied to the muscles in question for the propulsion of blood, lymph, and exudations from the periphery toward the centre.

In Europe this is used, combined with movements, in local troubles, such as neuralgia, muscular rheumatism, sprains, stiffness of joints and tendons, cerebral congestion, chronic dyspepsia and constipation, chorea, writer's cramp, etc.

Dr. Weir Mitchell, of Philadelphia, in his "Treatment of Nervous Diseases by Rest," has applied massage, as he says in his "Fat and Blood," page 71, "to deprive rest of its evils." This massage consists of gentle but firm rolling, kneading, friction, etc., of the skin and muscles of the whole body in order to bring about a free circulation of the blood

and thereby improve or maintain the nutrition of the muscles.

No doubt this way of using massage in nervous diseases is of very great value, but all over the United States we find men and women pretending to give "massage" in the broadest sense of the term as used by Dr. Graham. These professionals claim to have received their training from Dr. Mitchell.

According to Dr. Graham's book, page 34, "Dr. Mitchell states, over his own signature, that he does not teach massage." But suppose we admit that some of them have learned from Mitchell's masseurs, still, what do they know? How is it possible that a man who has been taught how to use his hands, only in a certain way, for a special malady, can know how to use them, and how and when to apply proper movements, in all the different diseases which are treated by "Swedish movements and massage?"

Much experience and hard study is required in order, understandingly, to give a full treatment. The different manipulations may be for some persons easy enough to learn; but the active and passive movements, so indispensable for the cure of certain forms of disease, require an exact knowledge of anatomy and physiology for their proper application and performance.

I will now in a few words describe the mode of treatment which Ling systematized.

Ling distinguished between five different fundamental positions, viz., standing, kneeling, sitting, lying, and hanging; these he subdivided into a number of starting positions with the arms, legs, trunk and head, which combined in various ways make nearly 12,000 positions, in which the different movements may be either taken or given. And so the number of movements may be said to be endless to suit each particular ailment.

The movements may be spoken of as: strengthening movements, such as flexion, extension, torsion, etc.; stimulating movements, as percussion, vibration, etc.; quieting movements, as rotation, friction, etc.; derivation movements of the extremities; purgative movements, as kneading, pressing and active movements on the bowels. Some movements have a special effect on the respiration, others on the circulation, etc.

To illustrate how these movements are applied in different cases, let us take, for instance, a patient suffering from anæmia. If he is well enough to sit up we will give him:—

1. "Chest lifting," a respiratory movement; the chest is expanded, the inspiration becomes deeper, and is followed by a stronger expiration. Thus a greater amount of oxygen is taken in and waste matter given off. This must stimulate the functions of the organs and thus accelerate the process of renewal and an exchange of material in all parts of the body.

2. "Foot rotation," to equalize the circulation by increasing the flow of blood to the feet.

3. "Stomach vibration," which has a direct effect on the stomach, and will improve the appetite and the digestion.

4. "Forward arm rotation," a respiratory movement, which has a similar effect on the first one.

5. "Trunk rotation," which brings the muscles of the waist and bowels into play, and acts on the circulation, especially in the portal system.

6. "Knee flexion and extension," with resistance. This has a strengthening effect on the flexors and extensors of the leg and promotes the circulation.

7. "Bowel friction," to promote operations of the bowels.

8. "Back percussion," which stimulates the nerve centres.

These movements can of course be applied to the patient in different positions according to his strength; and when the patient improves other and more vigorous movements are used.

In a case of constipation a prescription of movements like the following would be the most effective:—

1. "Leg flexion and extension," an active movement under pressure on the sacral region and the bowels. This movement brings into play the flexors and extensors of the legs, and has a purgative effect on the bowels.

2. "Backward leg traction," a duplex movement alternately from a standing position, the patient resisting forward. Here the muscles of the bowels, the flexors of the thigh and extensors of the calf are in action. Wherefore this movement has a purgative as well as a deritive effect on the organs of the pelvis.

3. "Forward trunk flexion," pressure being exerted on the sacral region and the bowels, from a lying position—active movement.

4. "Trunk torsion," from a kneeling position—duplex movement.

5. "Trunk rotation," from astride, sitting position—passive movement.

The third, fourth and fifth movements bring into play all the muscles of the bowels, increasing the circulation of blood in the portal system; they have a good effect on the digestive organs and act purgatively in a measure.

6. "Breech percussion, deep," standing position—passive movement. This acts on the sacral nerves, and has a stimulating effect.

7. "Bowel kneading and friction," reclined position, with the muscles of the bowels perfectly relaxed—passive. This acts directly on the intestines and promotes the operation of the bowels.

8. "Vertical arm flexion and extension," sitting position—duplex movement. This has a strengthening effect on the muscles of the arms, chest and back, and tends to equalize the circulation of the blood.

In cases of heart disease, movements must be given which shall diminish the pressure of the blood and decrease the activity of the heart. Inspiration acts as a pump on the circulation toward the heart. Muscle contractions produce a pressure on the walls of the blood-vessels, whereby the blood is forced toward the heart; hence, respiratory and circulatory movements are here of great value.

Dr. Gustaf Zander, of the Mechanico-Therapeutic Institute in Stockholm, says: "In heart disease movement treatment is an uninterrupted necessity, at least during the winter. It is a pity for any such patient, who has the opportunity, not to use this treatment. It is astonishing what excellent effects regular, gentle, but many-sided muscular exercises have on diseases of the heart. Some of these, when not too far gone, can be entirely cured; others can be stopped from further development, and all can be relieved."

In scoliosis, where the muscles on the convex side are weakened and pathologically changed, and the muscles on the concave side normal, it is clear that the weakened muscles on the convex side must be strengthened and developed. According to Dr. T. J. Hartelius, the principal of the Central Gymnastik Institute in Stockholm, "The restoration of a pathologically changed muscle cannot be produced by mechanical extensions, but only by muscular exercise and electricity."

"But," he says, "for the restoration of a curved spine extension is necessary. The question is, therefore, whether this can be effected by the organism's own remedies. This is easy enough to prove. In mild cases of lateral curvature, where there is not yet any deformity in the vertebræ, the spine is straightened at each extension of the back. By flexion to the convex side the spine is not only straightened, but it can be bent so far as to display a curve to the other side. In cases where the deformity of the vertebræ makes a full extension of the spine impossible, it is still possible by its own strength to produce an extension in its highest degree.

For instance, in a "forward trunk flexion and extension" the patient stands supported on the thighs and bends forward; when he raises himself up the operator resists him on the neck. Or, in "backward trunk flexion," the patient is lying on the front of his legs, and raises the back up backward.

These, and a few other active movements can, better than any other mechanical remedy, straighten out the curved parts. In a one-sided scoliosis, for instance, with the convexity to the left, "lateral trunk flexion to the left" may be given. The operator puts his hand on the highest point of the curve, and resists the patient when he bends down. This can be performed either with the patient sitting, standing, or lying on his right side. Several other movements are also given, with the view and intention of strengthening the muscles on the convex side, and straightening out the spine, and should be used according to the strength of the patient and the particular shape of the deformity.

Dr. Schreiber (page 86) says: "The treatment of scoliosis by the Ling system, which has scored some of its greatest successes in this very department, requires, however, quite a special study, and can hardly be carried out without both apparatus and trained assistants."

Dr. M. Eulenberg, in "Die Schwedische Heilgymnastik," Berlin, 1853, says:—

"Ling's method is the only truly rational therapeutic means for the cure of chronic disturbances of motivity, such as result from spinal curvature, and for pseudo anchylosis, the phthisical-tendency, pigeon-breast, peripheral paralysis, etc.

"Even in cases of paralysis from lesions of the cord, it may still effect a cure where all other measures, undertaken after the original disease has run its course, will be found useless. Ling's gymnastics have an even greater and

more certain effect upon innervation and nutrition than the common form of gymnastic exercises. Spinal (lateral) curvatures, resulting from faulty carriage (in consequence of a preponderance of muscular force on one side of the body), are nowadays never treated by any good orthopædist by any other means than the Swedish system."

In various joint affections this treatment has been used with great success. It may be used to increase the circulation in and around a joint, or to promote absorption and to squeeze exudations out of the joint.

In treating a sprain of the ankle we begin with gentle centripetal frictions, commencing at the toes and gradually proceeding upward as far as the painful spasm reaches, using the finger-tips, then the whole surface of both hands. As the pain diminishes more and more force may be employed, and when the contraction has so far relaxed as to leave the joint movable, gentle passive flexion and extension and rotation of the foot should be performed. After the second or third sitting the movement of the ankle-joint will generally be quite free and almost painless; then more force may be applied, and active and duplex movements used. Usually the treatment is repeated two or three times daily Provided there is no fracture, four to ten days is enough to cure the patient, and the sooner treatment is begun the quicker will be the cure. Other joints are treated on the same plan. But the hip and shoulder joints are more difficult to treat, and require a much longer time in order to produce a cure.

And so on, each different disease has its own peculiar treatment.

It may be stated, as a fact, that not only in the Central Institute, in Stockholm, but in a number of Swedish movement institutions in many parts of Europe, the following diseases have been treated successfully, according to this method: Chlorosis, anæmia, scrofulosis, scorbutus, different neuralgias, rheumatism, gout, different venous congestions, adhesions of the pleura, emphysema, hysteria, hypochondria, general nervousness, insomnia, epilepsy, paralysis, chorea, writer's cramp, bronchial catarrh, heart diseases, dyspepsia, constipation, hyperæmia of the liver, paralysis of the bladder, disordered menses, prolapsus and adhesions of the uterus, round shoulders, chicken-breast, scoliosis, chronic joint diseases, stiff and sprained joints and tendons, hydrarthus, muscular atrophy, and a few others.

After what has been said, it may be easily understood that it is absolutely necessary that the operator should not only be fully acquainted with the movements and their uses in different cases, but should also have a full knowledge of anatomy and physiology, and of the exact character of the disease which he is to treat. Still, it has happened several times that I have been called in by physicians to treat some of their patients, and when I have asked what the trouble was, I have been told that it was not my business to know.

Gentlemen, it is co-operation between the medical profession and the gymnasts, which is desirable and necessary in order to produce the best results.

Having now given a short description of the Swedish Movement and Massage Treatment, I shall here give a few cases to prove its value.

From Dr. Hartelius, of Stockholm, I quote the two following cases:

1. "A lady, 30 years old, with a dangerous organic heart disease—stenosis of left ostium atrio-ventriculare, with insufficiency of mitralis. The action of the heart was very weak. The patient suffered with great shortness of breath and painful palpitations; a great deal of subcutaneous effusion in the lower extremities, and also considerable effusion in the peritoneum. Her aspect was cyanotical.

Mild chest liftings and vibrations were given to produce strong inspirations, also rotation of the arms and legs to increase the circulation; gentle rotation and torsion of the trunk to act on the portal system, and centripetal friction on the lower extremities, to promote resorption of the subcutaneous effusion. In the beginning, the movements were very mild, but gave relief for a few hours at a time. Later the movements were applied several times daily, and now more lasting effects were produced. The patient received great relief, and more strength, and the effusion was lessened; but of course her organic trouble could not be cured. Experience tells us that each difficult heart disease must nearly always be under the influence of movement treatment, in order to secure permanently good results."

2. *Hyperæmia of the Liver.*—"A gentleman of middle age had been ailing a couple of years. He had grown very lean, the skin was

yellow, and his feet and ankles were swollen. The liver was considerably enlarged, especially the left lobe. There was no organic heart disease; there was a mild catarrh of the lungs; operations of the bowels were slow and difficult. He was treated twice every day by means of movements, and no other remedies were used. After one month the patient was considerably better; the liver was smaller; swelling had disappeared; appetite and flesh had increased. After the second month, having been treated once a day, the patient was cured."

Insomnia.—The 1st of October, 1887, I was called to see a gentleman 40 years old, who had been without sleep for three weeks. He was very weak, and complained of pain in the back, legs and wrists. He was considerably nervous, and had no appetite. The attending physician prescribed the diet and medicine, and I applied the movement treatment.

In the beginning, gentle compression of nerves was applied, and frictions from the shoulder toward the fingers, from the hip to the toe; also mild chest-lifting and vibration; gentle friction across the bowels and down the back, and, at the last, over the head. The patient had some sleep the first night, which was increased a little every following night. After a few days, the force of the manipulations was increased, and kneading and vibration, flexion and rotation of the extremities were applied. After two weeks, the patient slept the whole night, and duplex movements were added to the former. One month after the treatment commenced the patient was well, but continued to take treatment at the institute for another month, during which he gained considerable strength, and became twelve pounds heavier than ever before.

Paralysis as a Result of Apoplexy.—A gentleman, 50 years old, was stricken with apoplexy, resulting in a partial paralysis of the right arm and leg. Two months later I was called in by his physician to apply movement treatment. The patient was at this time still in bed, unable to move himself.

After three weeks' treatment the patient was up, walking about in his room, and now improvement was noticed from day to day. Six weeks after beginning the treatment it was stopped, the patient being able to walk as well as before the stroke, and having full use of his arm.

Here it may be well to say that such persons who have been troubled once with apoplexy, ought never to stop taking treatment, or at least only at short intervals, unless he has plenty of other healthy exercise, as it is the best means to prevent another stroke.

Rheumatism and Neuralgia.—On September 24, 1886, a lady, 55 years old, came to see me. She was five feet and six inches tall and weighed 230 pounds. She complained of rheumatism in her legs and arms, and could only walk up one flight of stairs with the greatest difficulty. On her arrival she was gasping for breath and sat down to rest for nearly an hour.

Eight weeks later, having taken treatment every day, the lady asked me if she might walk up to the top of the Washington Monument (about 900 steps). Although I knew that she had improved marvelously, and had lost nearly 30 pounds, I told her that it would be better not to try it yet, because who should carry her down again if she got tired?

She laughed and told me that she had walked up the previous day, looked around for half an hour, and walked down and home, about a quarter of a mile. She felt very well after it, and had no lameness or pain. After ten weeks' treatment the lady was entirely well, having had rheumatism for the last five weeks, and her weight was now 196 pounds. Last summer she called to tell me that she still felt like a young girl, and was going West for the rest of her life.

A gentleman, 31 years old, had suffered with muscular rheumatism in his right shoulder and arm for two weeks. He had not had any relief nor sleep for several days, when he came to me. Five days later he was cured.

Dr. N. N., 45 years old, had been in bed about three weeks with a very painful lumbago, and was unable to move himself. I gave him movement treatment six times, after which he was out attending to his own business.

A gentleman, 42 years old, had suffered from lumbago and indigestion for nearly eight months, and had given up all kinds of treatment. In April, 1883, I was called in by one of his friends. The patient who had once been a very strong and healthy laborer, was now run down to a thin, very feeble looking man. He did not believe in my treatment, but he submitted to a trial of it. The first treatment being satisfactory, it was continued

every day. The improvement was remarkable. The pain became less and less, and the appetite and strength were increased every day.

After three weeks' treatment the patient was well enough to attend to his business, and discontinued the treatment. Half a year later, when he felt some symptoms of the lumbago, he came to my institute and took one month's treatment. He has been well ever since.

A lady, 29 years old, suffered from sciatica for ten months. She had been in bed most of the time, and all kinds of treatment had been tried without any relief. One day in August, 1885, she felt well enough to be taken in a carriage and carried into my institution, where the treatment was applied. It pained her a great deal, but after a while it gave her relief, and she returned the next day. The fifth day she walked alone to the institute, and after three weeks' treatment she was cured.

Stiffness of Joints and Tendons.—A rather feeble lady, about 45 years of age, was struck on her right forearm. There was no fracture nor sprain, but the arm was kept in a sling for two months. Then the lady found that she could hardly move her arm at the shoulder-joint. The adhesions were broken up. During the operation the shoulder was mechanically dislocated and reset. Inflammatory adhesions followed, and the operation was repeated with no better result. The joint was stiff, with great inflammation of the deltoid and the adjacent nerves and tendons, and so tender and sore that it could not be touched, when the physician prescribed massage.

The patient being under the influence of an injection of morphine, administered by the physician, I was enabled to apply treatment, consisting of centripetal kneading and stroking. After a few days the injection was discontinued and passive movements were applied, in addition to the manipulations. Two weeks later active and duplex movements were used. After two months' treatment the patient was well.

Sprains.—A gentleman, 36 years old, sprained his right ankle by a fall, and had been on two crutches for eight months, when he came to me for treatment. There was no flexibility of the ankle, which was very tender and swollen. After six weeks' treatment, once a day, the patient was cured.

Last year one of my assistants sprained his left ankle in a gymnasium. He was brought home by his friends, and told to keep quiet in bed. He kept on all night bathing the leg with hot and cold water, and came next morning to the institute. The joint was slightly dislocated, the foot was turned upward and inward, and twice as large as usual. He was a strong young man, so I at once went to work and succeeded in putting it straight, after which a full treatment was applied. After four days' treatment, twice a day, he was well.

Hydrarthrus (Water on the Knee).—Prof. Dr. J. Nicolaysen, of Kristiania (Norsk. Mag. f. Lagevidenskab, 1874) communicates the following case:—

"A man, 32 years old, had suffered from hydrarthrus for six and one-half years. Repeated puncture and evacuation had always been followed by a reaccumulation of the fluid. Massage was used for several months, and the patient returned to his work. There was no relapse."

Another gentleman, 26 years old, had suffered from hydrarthrus of the knee for two months, when he came to the same professor, who sent him to me, being at that time in Norway. After two weeks' treatment the collection of fluid in the knee-joint disappeared, but the swelling of the capsule continued. After five weeks' treatment the patient was well.

The following are a few extracts from reports of the Swedish Movement Institution in Bremen:—

"Of 10 digestive disorders, constipation, cardialgia, flatulency, dyspepsia, 6 were cured, 3 greatly improved and 1 improved.

"Of 59 spinal deformities, 23 were cured, 17 greatly improved, 14 improved and 5 still under treatment.

"Of 6 cases of muscular weakness, 5 were cured and 1 greatly improved.

"Of 8 rheumatic disorders, 7 were cured and 1 greatly improved.

"Of 13 sprains, wrist, finger, knee and ankle being involved, all were cured in from four to twelve sittings."

A number of other cases could be given both from my own institution and others, but I believe these to be sufficient to show that the Swedish movement and massage treatment is well worthy of adoption by the medical profession in the United States.

SUBSCRIBE for THE MEDICAL BULLETIN.

FOOT-DISTORTION IN CHINA.

BY G. ARCHIE STOCKWELL, M.D., F.Z.S.
PORT HURON, MICHIGAN.

EVERYWHERE the fickle goddess *Fashion* appears as an arbiter of human destinies, her sway extending even to the yourts and wigwams of primitive nomadism. She demands blind submission on the part of her worshipers and following, neither class, rank or condition being exempt, and that, too, without regard to aptitude or reason. And it is to one of her most absurd freaks the womanhood of the "Flowery Land" are indebted for a deformity that is at once the marvel and disgust of all civilized beholders.

In no part of the globe, save this one corner of the Orient, is the beauty of the "female form divine" so jeopardized. Elsewhere heads may be flattened and elongated, noses, ears and lips pierced, bodies tatooed and scarred, busts obliterated or abnormally developed, the hands even mutilated; but the feet, those indispensables to sex, grace and comeliness, are inviolable.

The cause leading to the adoption of so barbarous a custom is unknown or forgotten—locked up among the mysteries of the past. The Celestials themselves are at a loss for satisfactory explanations; hence take refuge in fables and legends that, frequently, are the reverse of relevant. *Kung-foo-tse*,—Latinized by the Jesuits into "Confuscius,"—who descants with wearying accuracy upon most, even to the minor, details of life, here is utterly silent, and other classical writers of the kingdom are equally remiss. Some of the minor historians, however, profess to derive it from a period antedating the rise of the Imperial *Tsins*, claiming the record to have been lost in the general destruction of literature that attended the reign of *Chi-Hoang-Ti* of this vandal dynasty, 248 to 206 B.C.

The most popular tradition evolves from an infamous empress of the twelfth century B.C., one *Tanke*, who is reported to have combined the beauty of Cleopatra and wisdom of Semiramis with the morals of Messalina. Born with deformed feet, she was yet so attractive that "all men became her devoted admirers and slaves." Exquisitely sensitive regarding a fault that tempted the adverse criticism of her own sex, she cajoled her imperial lord and master into promulgating a decree that defined klump-feet as models of elegance, and commanded their adoption in all female children in their seventh year.

Another obtains in Southeastern portions of the *old* kingdom, and narrates the misfortunes of one *Pwang*, a concubine of *Yang-te*, an emperor of the *Suy* dynasty that flourished in the sixth or seventh century A.D. Consigned to the imperial harem in early childhood, and a constant sufferer from *bromidrosis*, or stinking feet, in order to render her presence tolerable, her attendants were accustomed to fill the hollows of her shoes with spice and aromatic powders that, sifting through the perforations communicating with the imperial stamp upon the soles, left as she walked the perfumed imprint of the yellow lotus; whence the flattery with which gentlemen of *Fuhkien* and *Kwang-tung* are wont to regale the ears of damsels possessed of exceptionally small feet: "Your step procures the Golden Lotus!" These efforts proving unavailing, by order of the court physician her feet were encased in tightly drawn bandages that, constantly worn, secured the desired result, and also brought about the present hideous form of deformity.

Dwarfed feet, however, are by no means universal even in *Old* China. They are forbidden to ladies of the Court, and among people of rank and standing are chiefly conspicuous by their absence, though every noble usually aims, for æsthetic reasons, to possess one small-footed wife or concubine. In fact, the custom, if anything, is a badge of the middle classes, such as small merchants, tradesmen, craftsmen, etc.; still lower again, it is abjured, as amongst the coolies. In many districts it is almost as much of a curiosity as in Pennsylvania or Ohio; and in Tartar and Mongol provinces, Southern Mandchouria excepted, has never been tolerated. More than once it has fallen under the ban of imperial displeasure, and during the *Ming* dynasty received a blow that sounded its death-knell, being prohibited on pain of decapitation; as a result it is becoming slowly but surely obsolete.

Neither is the deformity, as generally surmised, begun in early infancy. Instead, it is reserved for a period between the sixth and eighth years.* Undoubtedly experience has taught Celestials the fallacy of meddling with

*Seventh year according to Chinese reckoning; the sixth year according to ours. Orientals number ages by birthdays, consequently the child is a *year old when born!*

the foot before the bones and tissues have acquired the development essential to plasticity, and also that in early ages there is greater danger in overburdening the circulation with decomposed and effete products, for which it must necessarily be the eliminating channel.

Glancing for a moment at the relations of the feet, we find that during the first ten years of life no portion of the human frame undergoes greater transformations, physiological and osteological, than do they. In the perfect adult the foot has the form of an arch, convex above, concave beneath, the highest point being the *astragalus* or pedestal that affords support to the bones of the leg, and through this pedestal the weight of the body is transmitted to the ground by means of a series of articulations supplying the interval between the heel and toes—the scaphoid, cuneiform, cuboid and metatarsal bones. Observe, also, that the convexity of the superior surface is essential to the greatest possible freedom in motion of the leg, permitting innumerable changes in the position of the body without endangering its equilibrium or gravity; while the concavity from the number of bones entering into the formation of the sole ensures strength and accommodation to irregular surfaces. Again, the under surface of the foot is marked by two arches, one lateral, the other longitudinal and extending from the heel to the ball; and when brought to the ground the immediate points of contact are the two extremes of the longitudinal arch—the anterior lower portions of the *os-calcis* and anterior inferior borders of the *metatarsi*.

In the infant the sole is flat, the foot being without either arch; even the convexity of the superior surface is a matter chiefly of conjecture, owing to the abundance of soft tissue supplied by Nature with a view of affording maximum nourishment. The bones are irregularly developed, mainly cartilaginous in structure, and united by soft, tissue-like bands that, later in life, if not interfered with, will develop into ligaments of great firmness, elasticity and power. For months the support of any material weight is impossible owing to lack of ossification and dependent relations; meantime the soles turn inward, approximating their faces one to the other; also the foot is longer and broader in proportion to its height than in adult age. During subsequent development, however, the anterior foot and the inner border outstrip their antitheses, whereby straightening is accomplished, the changes being brought about by alterations in the structure of the bones themselves.

In the fact that osseous development does not approach completion until the sixth or seventh year, and that the bones are scarce ever firmly resistant until four or five years later, we see the philosophy of postponing the moulding and kneading essential to distortion until infancy shall be well merged into childhood.

Almost from the time the little one is able to prattle or comprehend speech, she is taught to look forward to the distortion and dwarfing of her feet. By the completion thereof she is ushered into womanhood and rendered marriageable, regardless of physical development, or fitness for duties of maternity. Wives who have yet to attain their eleventh year, and the first *mensem*, are by no means uncommon features of the Celestial marital relation, and as polygamy is restricted only by the ability of the male to provide, matrons and unbudded maidens are often found holding like fealty to the same master.

The torture, and it is no less, is instituted amidst an assemblage of relatives and friends, bidden to do honor to the occasion and the feast that follows. In order to render the tissues more amenable to the *squeezing* process, the feet are first submitted to the prolonged action of hot water, and subsequently liberally dusted with alum powder to further ensure contraction of the capillary vessels. The bandages, newly wrung out from hot vinegar, are now applied with all the combined strength of two operatives, one of whom at least is usually a professional expert, the child meantime being stretched at length upon a couch and there forcibly held by attendants, who do not scruple to stifle her cries of fear and pain beneath the hand, unless, as sometimes happens, the narcotic powers of opium have previously been invoked. The bandages employed are of stout, inelastic web, two inches broad by two or two and a half yards in length, especially designed for these purposes.

By a couple of turns the four inferior toes are doubled under and confined to the sole, the intervals meantime packed with the astringent powder, when the web is carried about the point of the heel and returned to and over the digito-metatarsal articulation. Pow-

erful traction is now made posteriorly, expression, kneading and like aids being also called into requisition, and in a way to crowd the bones of the anterior foot (metatarsals) backward and upward, over-riding those of the instep, which are thus forced downward to meet the heel that, by the same act, is displaced downward and forward to occupy a position in the same plane with, and perpendicular to, the bones of the leg. Finally, the whole is wound laterally as high as the tibio-tarsal articulation, every effort being made to limit nourishment and blood supply.

Every fourth or fifth day during the first month or two, afterward only once in as many weeks, the bandages are removed, each undoing bringing away considerable quantities of exfoliated cuticle and dead tissue, whereby more or less superficial bleeding is provoked. Usually, too, there is some excoriation and ulceration, and not infrequently patches of circumscribed gangrene are disclosed. The hot foot-bath supplements a cursory cleansing, more alum is applied and packed in the creases and raw places, when the wraps are replaced with increased severity and rigor. It is only when the deformity assumes the *hemi-conoidal* form, of which the great toe is the apex, the perpendicular heel the base, and the sole the flat surface, that the operation is deemed at all satisfactory. There are fashions, however, even in deformity, and various modifications obtain in different districts of the Empire, the most notable, perhaps, being that of Southern Mandchouria, where it is customary to confine *all* the toes to the sole in an attempt, seemingly, to obtain as nearly as possible a model of the equine hoof—a resemblance that is rendered more complete by the form of shoe worn.

From two to three years are required to bring a foot to the acme of Celestial perfection, during which period the little one is positively never, even for an instant, free from suffering and pain. The anguish which requires her to pass all waking as well as sleeping moments in the recumbent posture, with legs dangling over the hard edge of the couch, that circulation may be sufficiently impeded to benumb the parts, may be imagined. Never by any accident are the feet permitted to touch the ground until the operation is completed, lest such act should interfere with the moulding; consequently, the muscles below the knee become flaccid and atrophied, incapable of responding to any definite impulse of the will, depriving the leg of the contours that to the Anglo-Saxon eye constitute one of the perfections of female beauty,—a straight edge laid along the posterior border of the leg from between the condyles of the *femur* to the point of the heel reveals no incurvations that are not peculiar to the *tibia* alone. As a sequel we have not only a fleshless broom-stick leg, but displaced or distorted joint relations in every bone between the *tibio-tarsal* and *digito-metatarsal* articulations. Now it is the *posterior* lower portion of the *os-calcis*, the inferior borders of the lesser *tarsi*, and the superior surfaces of the four inferior *phalanges* that form the sole of the foot.*

Soon the doubled-under toes are relieved of their bones by processes of absorption, when the tissues become incorporated with the sole, defying recognition or accurate definition, and the bones of the foot generally unite, forming a single osseous lump rendered doubly hideous by means of scars and cicatrices everywhere apparent upon the integument. Indeed, foot and leg together resemble nothing so much as the big knotted stick Cruikshank's pencil has placed in the hands of "Bill Sykes," and it is little wonder, when the possessor has again learned to walk, her gait is so suggestive of the capreoline understanding of the sable Asmodeus; yet this, to the middle class Celestial, is the fastigium of female grace in progression.

During life the bandages are never dispensed with once their application is begun. Child, maiden, matron, widow, it is ever the same, the wraps supplying the demand that, among the fair ones of western civilization, is met by hose. Their removal is ever a matter of some hesitation and moment, since reapplication entails the services of an expert; consequently the "beauty-feet" are exposed to the air and action of fluids as infrequently as is consistent with the texture and wear of their coverings. To view them is to procure the most intense loathing and disgust, and is like unto "holding an inquest upon a half-decomposed corpse," to employ the simile of an English officer who once shared with me this privilege. It is a disgrace the Celestial belle, like the "beautiful and unfortunate *Pwang*," seeks to obviate by aro-

*This is hardly in consonance with Prof. Flower's statement as given in his "Fashions in Deformity;" his statements, as well as his drawings, are hypothetical merely, whereas the above is the result of personal dissections.

matics and perfumes quilted within her shoes, and though the result may be every way gratifying to Oriental nostrils, the reverse is the effect upon Anglo-Saxon senses.

On one occasion, examining the foot of a little maiden first put to the torture six months before, the removal of the wraps disclosed a ragged ulcer on what should have been the scaphoid promontory of the instep, at the bottom of which was discovered the upper (posterior) extremities of two metatarsal bones, denuded of periosteal covering, and the doubled-under toes were shriveled and black, giving indubitable evidence of dry gangrene. In spite of warnings spoken, the father insisted upon readjusting the bandages, lending his whole strength to the effort, without the least regard for the suffering induced and manifested by agonizing shrieks. A month later I recognized the little one as an inmate of one of the wards of the Foreign Hospital, both feet having suffered spontaneous gangrenous amputation at the ankle-joints. That this is by no means an unusual sequel will be borne out by any medical man who has passed considerable time in the Flowery Kingdom. Immediate resort to the knife with a view of subsequently fitting the stumps with artificial feet of the desired pattern, would seem a more reasonable and humane procedure, inasmuch as it would entail less torture, and less danger to life and health. Yet, after studying the subject in all its bearings, it may well be doubted whether the distortion that procures the klump-foot demanded by middle class Chinese etiquette, is more pernicious in its results, or more ridiculous, than the steel-ribbed corsets and French-heeled shoes of our own civilization: *Quien sabe?* Certain it is, I have seen numerous distortions, every bit as ugly from an anatomical standpoint, brought about by the latter; and it is no uncommon spectacle, in cities, to see ladies descending high and steep steps and staircases backward, owing to their inability to do otherwise, and all by reason of the *Louis Quinze* shoe.

ASPHYXIATED BY GAS.

BY N. B. SHADE.
HAGERSTOWN, MD.

A FEW weeks ago, a young man stopping over night at the Franklin Hotel, in this city, was overcome by gas escaping from the burner, which he had failed to turn off properly. He was found about eight o'clock in the morning lying on the floor of his bedroom, unconscious, and as cold as in death. Dr. Mason and myself were called in haste. The doctor had already given the patient a hypodermic injection of whisky, and was about ordering rubber bags and bottles of hot water when I arrived. We immediately proceeded to take advantage of every known remedy and appliance to restore consciousness and whatever vitality remained. We had, however, little hope of his restoration. The hypodermic injections of whisky were continued, and nitrate of amyl was given by inhalation. We also employed friction, massage, the hot bath, etc. Dr. Mason was compelled to absent himself on account of patients requiring his attention. He left the case entirely in my hands. Up to this time we agreed that there had been no improvement, and death seemed to be inevitable. However, I stayed by him for three long hours, with three able-bodied assistants who kept up a constant friction and manipulation in addition to the hot bath. I continued the hypodermic injections of whisky, and added to the treatment sulphuric ether and tincture of digitalis. After having given by the skin over one fluidounce of whisky and brandy, six drachms of sulphuric ether, and three drachms of tincture of digitalis, at eleven o'clock, our patient began to show marked signs of returning vitality. In an hour more he was restored to perfect consciousness. His lungs had become so filled with blood that expectoration was very copious for some days. He made a good recovery, however, and now enjoys his usual health.

In conclusion, I would say that I believe all that had been done for his resuscitation would have been useless had the digitalis been omitted. After each hypodermic injection of half a drachm of the tincture the improvement in the contractions of the heart was quite marked. Up to thirty minutes before the young man opened his eyes, I kept increasing the dose to 60 ♏. This began to produce wonderful results in twenty minutes' time, and in thirty minutes he looked around the room.

This is the second case I have had. The first case was unconscious eight or ten hours. He also made a good recovery.

THE MEDICAL BULLETIN has a large American and foreign circulation.

STOOP TO CONQUER.

BY J. D. KELLY, A.M., M.D.,
LOUISVILLE, KY.

IN these days of scholastic knowledge and scientific skill, there is a growing contempt for domestic formula and traditional procedures. The critical hand of modern investigation irreverently brushes away the sacredness that hangs over the formulated knowledge of the past; and, in so doing, often casts aside the unobserved truth in hasty search for a sign or seal of orthodoxy.

No error is so frequent in the experience of young practitioners, nor so common to all of them, as is this unprofitable contempt in which they regard all procedures not bearing the "impress of the university;" and no error so often carries them into embarrassment and humiliation. They learn, too often, only after most undesirable experience, that the books do not contain all wisdom, and that the schools are not the sole dispensers of knowledge. He who seeks precious gems only in jewelers' windows, may tread unknowingly over hidden stones of equal beauty and value. Truth needs no mark nor endorsement. Its inherent demonstrability everywhere and forever proves it, and no place nor circumstance can detract from it nor alter it.

In the practice of medicine, more perhaps than in any other calling, one encounters this fragmentary knowledge in various associations, sometimes quite unaccountable and ridiculous. However, it should not be scorned nor estimated by these, but rather by what it is in itself. The repulsive burr of the chestnut is not suggestive to the novice of the dainty morsel within. The wise or experienced mind will detect the truth, and acknowledge it as reverently in humble environments as when surrounded by devotees in wigs and gowns. It is the part of precedence to discern, to examine, to weigh, and then to decide in knowledge that justifies, and in wisdom that advances the high interests of the race.

I cannot better convey the importance of this subject than by giving a few illustrations from actual experience. A young practitioner, in combining brandy and milk at the bedside of his patient, was chagrined upon observing that it was at once converted into repulsive-looking curds and whey. The unpretentious nurse volunteered the information, "Oh! sweeten the milk first, and then it won't curdle!" Whereupon, by actual demonstration of this truth, the spine of the titled professional relaxed unconsciously, and he "stooped to conquer" ignorance that will never humiliate him again. On another occasion, a young medical man, while consulting authorities and exerting his knowledge to the utmost to relieve a serious case of inflammation of the bowels, was supplemented by the suggestion from a member of the family to apply a cat-skin as soon as it is removed from the animal. Suppressing his disgust, the doctor, upon consideration, discerned the grain of truth in this primitive procedure, and, acting upon the principle therein, annointed the tense and tympanitic abdomen with warm oil and covered it with a thick roll of well-warmed cotton-wool, thus availing himself of the merits of the cat-skin procedure, without its repulsive and disgusting employment. I have seen cases of obstinate vomiting that resisted all the usual and known measures for relief promptly and effectively controlled by a single teaspoonful of vinegar and salt, to the unspeakable discomfiture of the professional gentleman who had fought the condition for days with classic precision. I have seen eruptive diseases manifest themselves upon the skin in quick response to a drink of hot catnip tea, where aconite and ipecac and opium had failed in the hands of the attending physician. Instances might thus be recited in the experience of every observing practitioner, to impress the lesson of cautious observation in him who would acquire wisdom with knowledge. It is easier and simpler to acquire formula than principles; and the tendency to adopt methods and practice formula increases in proportion as we leave the field of tuition and enter upon the domain of practice. Here, also, caution is required, in order that individual knowledge and character may not be dissipated by practice, and the very opposite to the legitimate results of experience acquired. Is is easier and simpler to show conceit than capacity; and the inclination to arrogate is, therefore, greater, perhaps, in the young practitioner than when experience has imparted lessons, often severe and humiliating, but always valuable and needful where given.

To the young practitioner I would say, if you have capacity show it; use it in acquiring knowledge from experience. To acquire knowledge as you go on in practice and in life,

I would say, observe! observe! Chief of all faculties, cultivate observation. Observe everything in practice and out of it. Let no lessons slip by uncaught, no time be lived in vain.

Do not go to schools and libraries as you go to the post-office for your mail, expecting always to find knowledge there marked and labeled and pigeon-holed, just as you want it and ready for use. Keep your eyes and ears open, not only when at the bedside of your patients, but also when moving among men, when out in the fields, in company and in solitude. Cultivate observation till nothing can escape your attention. The sources of knowledge, the wealth of the world of facts and phenomena around you, will thus more and more awaken appreciation that is only equalled by wonder and admiration. Wherever you go, whatever your surroundings, this habit of observation will disclose to you entertainment, instruction and knowledge, making you wiser, stronger and better.

BEEF EXTRACTS.

BY W. R. D. BLACKWOOD, M.D.

THE good book says: "Train up a child in the way he should go, and when he is old he will not depart from it." When I was a child beef tea was a remedy valued alike by doctor and patient, and many a cupful have I taken since then—"a many years ago." Some time after I assumed the harness, medical men began to backslide on the merits of this old-time restorative, and, once begun, the tide of doubt and aspersion rose to flood height, as is always the case. Soon we learned from great chemists that beef-tea contained only "salts," and many authors proved that not only did it contain the normal amount of salts, but that in some mysterious way the other ingredients underwent transformation, for a pound of beef made into tea then contained more salts than it did when raw. As people either under advice or from ignorance continued to take it, we were informed that although not at all nourishing beef-tea was a mild stimulant; but occasionally we learn that nowadays it has lost even that property. It is simply inert. When a fever case dies we hear that had nourishment—real nourishment, been given, the case would have recovered; but that as beef-tea was largely relied on, of course the person starved. Here we find that beef-tea is like jelly—a delusion and a snare! How curious it is that in our grandmothers' days so many fever cases lived long enough to get better on jelly and beef-tea, and stood long sieges at that; but now we cannot get along without radical changes in diet. We don't at present have to stand the drain of repeated venesection either, and one explanation of the paradox may be that our progenitors bled out the "salts" only of the body, which were replaced by the tenuous beef-tea and equally innutritious gelatin.

Having received some little nourishment in my time from the article under consideration, and having continued to use it in my practice despite its great demerits, I am inclined to think that there is something more than "salts" in it, the opinions of the chemists to the contrary notwithstanding. That beef-tea may be made, and is made, in such a way as to lose all its albuminous constituents, and present nothing but greasy water as result, I know; but I also know that it can be made by any ordinarily intelligent person, and with not much trouble, so as to produce a food. I have elsewhere in several papers given the method of doing this, but as ladies care little about personal work in the kitchen, and care less about supervising the Milesian who reigns therein, the next best plan is to procure an extract of meat which can be dissolved in hot water and act as a substitute. There is no difficulty in purchasing beef extracts anywhere, for the market is full of them; but, like the codliver-oil emulsions, whose names are legion, you don't know which is good, or at least many physicians are led to patronize a given make more by its advertising than by its intrinsic worth. A beef extract may be only a stimulant just as much as beef-tea is. In fact one of the earliest and best known factures is inferior to ordinary tea in this respect. It is therefore terribly expensive, and, what is worse still, it damps the ardor of practitioners who want something reliable, but who fail to get positive and economical results from a prescribed dietary.

In anterior numbers of the BULLETIN I have given results obtained in special diets and stimulants, these papers being intended to point out what may be gained through careful study in varied phases of disease through the employment of articles suitable to the prevailing conditions of the patient. All the foods

were tried on persons under my direct charge in private or hospital practice, and I now take up the subject of beef extracts both as stimulants and actual food.

A good meat extract should contain nearly one-half its weight of albumen or albuminoids capable of conversion into peptones. Most of them won't stand this test. Of course, we have other ingredients, as for instance the inorganic substances which form from a quarter to three-fifths of the whole mass, with moisture and "extract." The albumen is the nutritive part, the others the stimulant. Ordinary beef-tea is wasteful and innutritious because the albumen is hardened by heat at the outset; hence it is thrown away with the fibrin. Even though the fibrin be ground up as indicated in my papers referred to above, the albumen is not available because of its firm coagulation which stomach digestion cannot break up. It must be gotten out before cooking, as I have described, else it is lost. If people won't trouble themselves to do this, then they must use commercial extracts; and which should they use? I have tried a number and some of them are good, others indifferent —a few very bad indeed. Several otherwise appropriate were offensive in taste, partly from method of preparation and from aromatic additions or too much salt, intended either to preserve them or to cover their inappropriate flavor. As a rule, all purely liquid extracts were simply abominable. No one would take more than a dose or two without energetic repulsion by the stomach.

Two groups of extracts claim attention—the simple article more or less rich in character, and that similarly good but additionally prepared by pre-digestion. If used in robust health the first when good *per se*, is probably as desirable as any, but when the object is to build up lost bodily weight after exhausting sickness, or to maintain strength during active disease, then the second group is definitely indicated. This is particularly so in gastric and intestinal disorders where their functional activity is largely impaired, and an important point is not to put the cart before the horse, so to speak, by taking into service the wrong digestive principle or ferment. Pancreatization is all the rage just now in prepared foods, but with lean muscular fibre—the beef under consideration—the peptone aimed at is, so to speak, a stomach peptone, not an intestinal or pancreatic product; and this is, *par excellence*, the substance to maintain vitality and to repair waste. I believe that frequently pancreatized foods prevent stomach digestion much as regurgitation of bile will thus act in debilitated or bilious subjects.

The diseases in which I have largely used extracts of this nature are phthisis, chronic diarrhœa, cholera infantum, typhoid fever, marasmus, gastric ulcer, diabetes, and neurasthenic cases, with the associated group of emaciation from poisoning by alcohol and the opium or chloral habit. In all instances digestion was imperfect, the appetite poor, the assimilation slow, and consequently nutrition below par. The phthisis patients were the hardest to manage from capriciousness, and next to them the gastric ulcer because of pain after eating. The chronic diarrhœa people were often troublesome, for, as is well understood, common beef-tea encourages looseness of the bowels, and some of the extracts were probably not very greatly different from the home-made article. Pancreatic preparations were not well borne in these cases, and I think that to some extent such articles interfere with gastric digestion. There is no contra-indication to the combined pre-digestion with pepsin and pancreatin if both the lean and fat of meat is used as food, but in the instances noted there was no fat presumably present. There should not be anything but the lean of beef employed in meat extracts, simple or peptonized. The typhoid patients did uniformly well under peptones, the diarrhœa not being notably influenced through their addition to the other diet.

Although we can obtain several good meat extracts I have found that the product of the Rudisch Company, of New York, gives me more definite results than any similar article. As much depends upon uniformity of product equally with intrinsic merit when first introduced, it is doubtless, because of careful supervision that the standard of this extract is maintained. Many good therapeutic and dietetic agents are allowed to deteriorate after becoming established, and as the fall is generally gradual this fact is not noticed until the quality becomes unbearable. The "sarco-peptones" from this company is, from all the testimony I can obtain, just as perfect to-day as when originally presented to professional notice. Although my selection of meat extracts did not

include this make until long after it became popular, it is evident from the testimony of such gentlemen as Jacobi and Lewis Smith, Frankl and Endemann, who have used it steadily from its inception, that it has always been as reliable as it is now, and it gives me pleasure to add my testimony unsolicited to theirs. Analysis by chemists in New York and this city show the "sarco-peptones" to hold a high place as an actual food; viz.:—

Peptones	44.45
Albuminoids (not peptonized) .	.80
Meat extract . . .	34.74
Inorganic matter . . .	20.01
	100.00

This is calculated on the dry product, and the result is confirmed by independent analyses in London and on the Continent. A close correspondence followed a series of analyses extending over several months, which establishes its uniformity of composition, together with strict purity. No admixture of foreign or inert material was detected, hence it is extremely soluble in water—an important characteristic. From its ready solution in hot water I frequently direct a large teaspoonful of it dissolved in this way as a light soup or consommé to be taken before dinner or as a relish during the meal. It is very palatable and therefore does not interfere with the flavor of associated viands which is a matter of importance. Most predigested foods have an after-taste perceptibly bitter; those containing free or uncombined pancreatin are specially liable to this defect.

The remarks just made refer to the use of the peptones as an adjuvant to the diet of those able to sit at table, persons not greatly run down in stamina. For bed-ridden invalids the "sarco-peptones" is given not only at regular meal times, but between them, and this to gain the stimulating effect along with the purely nutritive result. In all such patients the dose is given in small quantitiy every three hours, day and night. It is a long time from tea to breakfast, and I would often rather waken a patient two or three times after bedtime than have him go hungry simply because he is unable to express his wants.

A case of painful "tic" in a delicate lady recently gave me a good chance to test the merit of the article. She was subject to general neuralgia and had, during an attack, complete distaste for food. As the intervals of freedom from pain were not always long ones she became anæmic before I saw her. The best results from treatment were had through cataphoresis, the rheophore being wet with a mixture of chloroform, aconitia, and cocaine. When driven in by twenty to fifty milliampères relief soon followed, but her stomach was rebellious to almost everything. Solid food was rejected; milk only was retained in too small amount, and I therefore tried the "sarco-peptones," in the form of soup. It agreed nicely and, so far as nutrition was concerned, there was no farther difficulty. Had the soup disagreed I would have used it by the rectum either as a liquid or in suppositories. The latter form is, I am told, a favorite with many physicians, but I never use rectal alimentation except as a last resort. With daily inunctions of pure oleum theobroma, Bland's pill, and full diet when borne, in the intervals, and "sarco-peptones" during the attacks, she is gaining, and a few weeks will see her in robust health. The failure to cure her before I saw her was from lack of nutrition. The electricity only checks the neurotic spasm.

In a lady who became hemiplegic, with aphasia and agraphia, fifteen days after her confinement, and in whom lactation was apparently failing, the Rudisch extract evidently sustained the mammary function until innervation became better established. Her appetite did not fail at all from the outset, but she needed super-alimentation for a while. Malt or malt beverages did not act as well with her as they usually do as galactagogues, and it was with considerable anxiety that I watched her case for the first ten days. The baby refused artificial feeding, and as it was the first, and therefore idolized, its nutrition was unusually important. My principal reliance in stimulation of the glands is static electricity, but of course this agent was not admissible, owing to the recent brain lesion. The "sarco-peptones" braced her up wonderfully, and instead of her milk being watery, as is said to be the case under such paralysis, it improved in quality, and in quantity it is nearly if not quite as abundant as before the stroke. Although I see a good deal of paralytic disorder this was my first puerperal case, excepting one two years ago, in which aphasia only occurred within a week after delivery. That lady recovered soon; this one promises a slow getting up, but she nurses well, which is important.

In a woman of over sixty, who had an attack of broncho-pneumonia subsequent to a bilious remittent fever, the strength decreased rapidly, and as the digestive system had not recovered its tone before the pulmonary complication set in, the exhaustive expectoration added to the previous debility. She was rather "finnicky," as the Scotch say, about her diet, and she wanted things unsuited to her, and refused others which were appropriate. To keep her up I used the "sarco-peptones," spread upon soda biscuit, at meals, and as she thought it to be something new in jellies she took it, with an ounce or so of peptone soup between the regular repasts. This tided her over the worst until her stomach would bear other nutriment. Aside from orange juice she took little else for ten days and she eventually recovered, although for a time she was very sick and despondent. From my observation in this instance I think the Rudisch extract would be valuable in any pneumonia from its combined stimulant and restorative action. In the form of soup it serves as a good vehicle for carbonate of ammonia when that salt is indicated, and this is frequently the case in pneumonia.

The cases specially noted might be multiplied, but they will serve, along with the general remarks preceding them, to illustrate the value as a roborant of the Rudisch "sarco-peptones." I have found it necessary in most cases to direct the addition of a little salt, as the extract does not appear to have any in it. As I do not know the method of preparation my opinion in this regard may be erroneous, but at any rate the addition renders the article more palatable. The method of sealing it by a layer of paraffine is a good idea, and the product should retain its virtue almost indefinitely as air cannot penetrate the covering, which is easily removed when desired. A jar left open purposely did not mould, become sour, or ferment in three days, which shows its keeping quality to be good; better, in fact, than its makers claim, for they suggest its liability to mould if exposed to damp and heat.

As my object in noticing various foods is to give personal experience in their use for the benefit of those who do not have good opportunities for investigation, I have in this paper considered an important class of nutrients, and the one specially noted is, without doubt, highly satisfactory for the purposes enumerated somewhat hurriedly in what I have written.

AIDS TO DEFECTIVE HEARING, WITH EXPERIMENTS ON DEAF MUTES.

BY LAWRENCE TURNBULL, M.D., PH.G.,
Aural Surgeon, Jefferson Medical College Hospital, Philada.

THE first and most natural means employed by a deaf individual is to turn the best ear towards the speakers, and, second, to use the hand and fingers to press the auricle forward, so as to increase the reflecting surface behind, that the sound may be reflected into the ear. Another method, used by men, is to place the opera-hat, folded, behind the ear. In the case of deaf women, a very pretty invention, of which they can avail themselves, is a black Japanese or hard rubber fan. Still another method, and one which all youug deaf persons should be taught, is to watch the mouth and lips of the person speaking, as by this means many sounds which are indistinct to the ear, can be seen and understood. There are cases of absolute deafness, or deaf mutes, who are so bright, and have cultivated this faculty to such perfection, that they can, even in a room with many individuals, carry on a conversation with so much rapidity, and apparently no effort, as to surprise the person engaged in it, when informed that the individual was a deaf mute, and did not hear one word of the conversation. Ear trumpets are bent so as to cause the sound to be deflected from a straight line, into the ear, increasing the calibre of the tube, and making the portion which receives the sound in the form of a funnel, the tube could be shortened, and a large volume of sound received; this again divided into smaller currents by a diaphragm with small openings, so as to impress the dull, nervous apparatus of the deaf ear.

The material of the tube has no influence on the pitch, but affects the quality in a striking and important manner, and the condition of the interior surface, whether rough or polished, or lined with cloth, has no effect upon the intensity of the sound.

As has been stated, the shape of the tube has an important influence; if it be of the same size throughout, the sound will be simply condensed and strengthened by the reflection; if it be tapering, the angles will become more and more acute and the note deeper, the sound being increased; if it be conical, the base receiving the sound, and the apex giving it exit,

as in the speaking-trumpet, the angles will be less and less acute, until at last it may be even obtuse.

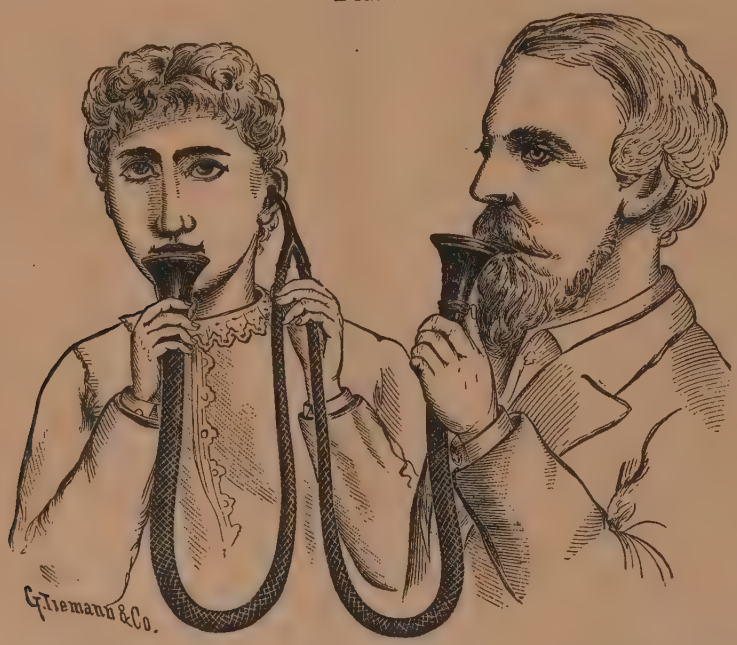
For a full account of all the varieties of ear-trumpets see p. 49 to 54 "Manual of Diseases of the Ear."

Another mode of hearing is by the teeth, and when the middle ear is entirely closed to the admission of sound, we then resort to audiphone, dentiphone, or hard rubber acoustic fan, which is nothing more than a polished sheet of hard rubber, fan-shaped and bent to the necessary curve, and kept in place by a silk string (see experiments with the foregoing apparatus in my work on "Defective Hearing," Ch. X, p. 131).

It has been found useless in the transmission, and concentrating or strengthening the effects, of sound in cases where there is even very little hearing power. It is also serviceable in testing deaf children.

It is not sufficient for the pupil to hear what is said to him; he must also hear himself say the same thing after a time. In class-room instruction, after adjusting the instrument, the teacher first speaks through one of the tubes, and requires the pupil to repeat the words or sounds that have been uttered to him through the other tube. This enables him to compare his own enunciation with that of his instructor, and, after repeated trials, to obtain such con-

FIG. 1.



In the Medical and Surgical Reporter, Vol. LVI, p. 616, we describe the results obtained by the use of Currier's duplex ear-piece, in deaf mutes, in twelve cases; but at that time had not experimented with it ourselves.

Now we present a fuller notice, with an illustration and have tested both forms.

Fig. 1 is Currier's duplex ear-piece, for the instruction of the deaf mute, consisting of a double tube, with two openings, for the voice, one to speak into and one for the very deaf to hear their own voice, so as to modulate it.

It has but one hearing-tube at the union of the two large tubes, both of which communi cate with the ears of the patient.

trol over his vocal organs as to secure the reproduction with clearness and precision.

Without this aid a deaf person is wholly dependent upon the ear of his teacher, of whom he is obliged to inquire as to whether he has spoken correctly or not. But with it, he can depend to a great extent upon his own ear, only asking that the words shall be repeated a sufficient number of times to enable him to make the necessary comparisons. By means of such an education of the ear and the voice, the partially deaf will be able to take their place in the society of the hearing, and also to converse with all who may address them through the mouth-piece of the tube.

Another form, (Fig. 2) is the Currier conico-cylindrical tube, and differs from the American conical conversational tube by being fully one inch at its widest extremity, while it is gradually tapered at the other end, which enters the ear, one-half an inch.

It is the most powerful conductor of the human voice yet perfected. It enables the voice to penetrate a greater degree of deafness than any other instrument, and will be found of value to such persons as may possess even the lowest degree of hearing, of being also useful in training the ear, when the power of hearing is not totally extinct. Yet there is one objection to this tube; the horn terminations prevent the full conduction of the central core of metal.

Experiments Testing the Hearing of Deaf Mutes.—The following preliminary examinations were made before testing the patients, with the Currier ear-trumpet:

No. 1. Male; bright, intelligent face. Age, 18. Cause as stated when admitted into institution for instruction, spotted fever. Right aerial conduction, none. Right bone conduction, slight. Left aerial conduction, none. Left bone conduction, slight. Right membrana tympani sunken, opaque, with lines of deposit. Left membrana tympani sunken, opaque, with divers deposit at handle of malleus.	No. 2. Female; meatus filled with dark cerumen, which was removed; felt all the sounds. Age 18. Cause as stated when admitted into institution for instruction, spotted fever. Right aerial conduction, slight. Right bone conduction, fair on contact. Left aerial conduction, slight. Left bone conduction, fair on contact. Right membrana tympani, sunken, opacity general, with deposit at points. Left membrana tympani sunken and opaque, very oblique position.	No. 3. Very bright, intelligent girl; was able to hear all of the vocal sounds and even the human voice. Age 21. Cause as stated when admitted into institution for instruction, born deaf. Right aerial conduction, good. Right bone conduction, good. Left aerial conduction, good. Left bone conduction, good. Right membrana tympani not sunken, fair color, slight reflex. Left membrana tympani sunken and opaque, very oblique position.

Robert A. K. was born February 2, 1869, in Northumberland County, of hearing parents. He became deaf at the age of four years from a severe attack of spotted fever; he has an aunt, father's side, who is deaf; no other deaf relatives. Parents not related.

This boy, while *very* deaf, is mentally bright, and possesses a strong constitution. An examination developed the fact that he is no way sensitive to sound conveyed to the ear by means of a trumpet; neither the single nor double trumpet affected him, not even slightly.

Kate A. B. was born May 10, 1869, in Centre County, of hearing parents. She has no deaf relatives so far as can be learned. Parents in no way related.

This girl lost her hearing from spotted fever, when she was three years old. Her general health has always been good, and she is very bright and intelligent.

With the *metal* (old style) trumpet she evinced considerable sensitiveness in the left ear, not so much in the right. The Currier instrument did not seem any more effective than the former.

We are of the opinion that in this case, as in the former, there is not enough sensitiveness to sound to warrant any serious attempt at *aural* development.

Ida B. B. was born deaf, of hearing parents, April 26, 1866, in York County. Her parents

Fig. 2.

are not related; she has a deaf brother, a congenital; no other deaf relatives. General health good; mental capacity, much above the average. Much sensitiveness to sound was developed in this case, both instruments affected her very strongly, and, as far as we were able to judge, we would think her a good case for aural training.

Conclusion.—These powerful ear-trumpets will be found useful in a form of massage of the muscles of the ear, in a few cases, in the sclerosed form of chronic catarrh, with loss of elasticity of membrane, anchylosis of the ossicula, especially of the foot-piece of the stapes,

and exostoses or hyperostoses of the same, but not in scrofulous or tubercular disease of the ear with progressive deafness. They have been found of little use in our hands. Another form benefited, where there is rigidity of the malleus, incal, and stapedial joints, with diminished movements of the latter. These instruments should be carefully used each day from five to fifteen minutes, preceded by the use of Seigle's speculum, and where the individual is profoundly deaf, and unable to hear his own voice, however elevated, the double tube will be found the best instrument.

The use of the single and double instrument has been found of service in those supposed to be entirely deaf. Care should be taken that an examination take place, as a large number of deaf mutes can hear sounds, although they may not have sufficient hearing, to have learned to speak through the instrument. Nevertheless, many such cases, after they have been taught articulation, and to read speech on the lips, seem able to be trained, to a greater or less extent, to understand the sounds which had previously been unintelligible to them. The plan with such cases has been to repeat sounds first, then short words, then longer ones, then sentences, until they can copy the sounds and repeat them. All this would seem to be a slow process, and the teacher has frequently been obliged to call lip-reading power to their aid in teaching them which sounds and words he is trying to make them recognize through the ear.

In this system of training, it has been found that the Currier double ear-tube is of great value. As has been before stated, it has two mouth-pieces, one to be used by the pupils in conveying the attempt he makes to copy or repeat the words his teacher is speaking, the other enables him to compare the sounds made by the teacher. Speech learned through hearing is found to be better than when learned through sight.

THERAPEUTIC NOTES.

BRIGHT'S DISEASE.

℞. Potas. nitratis . . . . ℥ij.
Ext. fabianæ imbricatæ . . fʒj.
Aquæ dest. . . . . ʒss.
Syrupus . . . ad ℥iv.
M. Sig.—Teaspoonful every six hours.—*Med. Age.*

BRIGHT'S DISEASE.

Semmola's formula for albuminuria dependent on nephritis, is:—

℞. Sodii iodidi . . . gr. xv.
Sodii phosphat . . . gr. xxx.
Sodii chloridi . . . gr. xc.
M. Sig.—Dissolve in water, and give in the course of twenty-four hours, either alone or with milk.—*Medical and Surgical Reporter.*

IODOPHENOL IN PERTUSSIS.

Rothe prescribes (Journal de Médicine de Paris):—

℞. Acid carbolic . . . gr. ¾.
Alcohol . . . ♏j.
Tinct. iodin. . . . gtt. v.
Aquæ menth. piper . . ʒxiiss.
Tinct. belladonn. . . ♏xv.
Syrup papaveris . . ʒiiss.

[Syrup papaveris is but little used in America; its opium strength is half a grain of opium to one thousand grains of syrup, and more definite preparations of opium may be better employed.] Of this a small teaspoonful to a dessertspoonful may be given every two hours.—*Practitioner and News.*

MYALGIA.

℞. Ammonii chloridi . . gr. xxx.
Extracti belladonnæ . gr. ss.
M. Sig.—As a dose three times a day.—PROF. WAUGH.

IRITIS.

Prof. Keyser considers this a most excellent antiphlogistic in iritis:—

℞. Hydrargyri chloridi corrosivi gr. $\frac{1}{20}$.
Extracti belladonnæ . . gr. $\frac{1}{10}$.
M. Sig.—In pill, ten minutes after each meal.—*Medical Times.*

PRURITUS OF FEMALE ORGANS.

℞. Hydrargyri bichlor gr. viij–gr. xvj.
Spt. camphoræ . fʒviiss.
Aquæ distill. . fʒx.
M. Sig.—Bathe twice daily with the lotion.—*Hospital Gazette.*

PRURITUS PUDENDUM.

℞. Ungt. hydrargyri nitratis . ʒviiss.
Hydrargyri oxidi rub. . gr. xx.
Adipis . . . . ʒiv.
M. Ft. ungt.

INTESTINAL HEMORRHAGE.

℞. Acid sulph. aromat. . . ♏xv.
Spts. chloroformi. . . ♏xx.
Tinct. camph. comp. . . ʒj.
Decoct. hæmatoxyli . ad ʒj.
M.—For a dose.

CHRONIC RHEUMATISM.

Dr. John Specht finds the following mixture very efficacious in chronic rheumatism:—

℞. Potassi iodid. . . . ℥iv.
Minct. cimicifugæ . . ℥iss.
Vin. colch. sem. . . . ℥ij.
Aquæ . . . q.s. ad ℨiv.

M. Sig.—One teaspoonful in water or milk three times a day.

If there is much inflammatory deposit in the tissues about the joints and extremities, the parts to be painted with sol. iodin. comp. If much pain, apply tinct. aconit. rad.

PERICARDITIS.

℞. Sparteini sulph. . . . gr. iij.
Aquæ destillat. . . . fℨij¾.

M. Sig.—Twenty drops in sweetened water or wine two to four times daily.

℞. Sparteini sulph. . . . gr. iij.
Syr. aurantii cort. . . fℨiij.

M. Sig.—Dose, a small spoonful in water four times a day.—*Medical and Surgical Reporter.*

SORE THROAT.

℞. Hydrargyri bichloridi . gr. ss.
Sodii benzoati . . . ℨss–ℨj.
Glycerinæ destillatæ, .
Elix. Calisaya bark . āā ℨij.

M. Sig.—One teaspoonful every hour or two hours.

In every case the membrane has disappeared in from three to six days.—*St. Louis Courier of Medicine.*

"MISTURA BISMUTHI COMPOSITOR."

℞. Bismuth subnit,
Magnes. carb. . . āā gr. xv.
Pulv. tragacanth co. . . gr. x.
Tinct. calumb. . . . ♏x.
Aquæ chloroformi . ad ℨi.

M.—For a dose.—*Canada Med. Record.*

SYRUP OF SUPERPHOSPHATE OF IRON AND OXYGEN.

℞. Syrup of superphosphate of iron fℨj.
Solution of peroxide of hydrogen, 10-volume strength . fℨj.
Pure glycerine . . . fℨj.

Sig.—Make a mixture of three ounces. Dose: For an adult, from one to two fluid drachms two or three times a day in three ounces of water.

In cases of a neurasthenic type especially when anæmia is present, this syrup is a useful remedy. In pure anæmia, the syrup is to be used in combination with an occasional saline purgative.—Dr. B. W. Richardson, reported in *N. Y. Post-Graduate Journal.*

FOR TAPEWORM.

℞. Ext. filicis maris ætheris . gr. cl.
Ext. pumicæ granati. . gr. cl.
Pulveris jalapæ . . gr. xlv.

M.—Divide in pil. No. lxx.

Before giving a free catharsis must be induced. Twenty of the pills are to be taken on the day following the purge (during which the patient must fast) and the remainder on the next day in two or three hours.—*Medical Age.*

A LAXATIVE TONIC.

℞. Ext. gent. . . . . gr. xiij.
Ext. belladonnæ . . gr. j.
Hydrarg. chlori. mit. . gr. j.
Ext. nux vomicæ . . gr. iv.

M. Ft. pil. No. xii.

Sig.—One pill three times a day.—Dr. Albert Friche, Philadelphia.

LINIMENT.

℞. Castor oil . . . . 4 parts.
Spts. camphor . . . 2 "
Spts. turpentine . . 1 "
Tinct. cantharides . . 1 "

—*North Carolina Medical Journal.*

EMULSION OF TEREBENE.

℞. Terebene,
Ol. gossyp. sem. . . āā ♏clx.
Pulv. acaciæ . . . ℥vj.
Pulv. sacchari . . . ℥ij.
Aquæ q. s. fiat . . . fℨiv.

M. Sig.—One to two teaspoonfuls (=10–20 drops).—*Amer. Journal of Pharmacy.*

FOR INTERMITTENT FEVER.

℞. Iodine . . . . gr. xv.
Iodide potash . . . ʒiss.
Aquæ puræ (destillat.) . gr. cl.

M. Sig.—Five drops every two hours, to be given in water.

A GOOD RESTORATIVE AND TONIC AFTER ILLNESS.

℞. Sulphuric acid (diluted) . ♏xl.
Sulphuric ether . . . ℥ij.
Sacchari albi . . . ℨss.
Aquæ mentha . . . ℨvj.

M. Sig.—A teaspoonful every three hours.—*Canadian Practitioner.*

ACUTE RHEUMATIC PERICARDITIS.

℞. Bromide of potash . . ℥vj.
Salicylate of sodium . . ℥vj.
Tincture of colchicum root ℥j.
Tincture of aconite . . gtt. vj.
Peppermint water . . ℨvj.

M. Sig.—A dessertspoonful to be given every two hours.—Dr. Vogler, in *Medical Times.*

DYSPEPSIA.

The following prescription is an excellent intestinal antiseptic:—

℞. Beta naphthol,
Salicylate of bismuth,
Carbonate of magnesia, āā gr. ivss.
M.—To make one powder.

This powder was to be taken every fourth hour. In eight hours the patient returned in excellent spirits; the first furuncle had dried up, the second was aborted, and there was no sign of the appearance of any others. The treatment was kept up with strictness for a week, and then stopped.—*Med. and Surg. Reporter.*

MIXTURES FOR THE TREATMENT OF RHEUMATISM.

Dr. J. M. Chaplin, of Bowling Green, Ohio, writes to us recommending the following formulæ:—

1. *For Acute Rheumatism.*

℞. Salicylic acid (from oil of wintergreen)	ʒiv.
Sodium bicarbonate	ʒv.
Peppermint water	fʒiv.
Potassium citrate	ʒij.
Wine of colchicum seed	ʒiv.
Syrup to	fʒviij.

Sig.—Half a tablespoonful to be given every three or four hours.

2. *For Subacute Rheumatism.*

℞. Potassium citrate	ʒj.
Essence of lemon	ʒiij.
Syrup	fʒij.
Tincture of chloride of iron	ʒiij.
Water to	fʒiv.

Sig.—A teaspoonful, diluted with water, to be given every four hours.

When malarial poisoning is suspected, Dr. Chapin adds about half a drachm of liquor potassii arsenitis to either mixture.—*N. Y. Medical Journal.*

APPLICATION FOR WARTS.

℞. Acidi salicylici	1 gramm.
Alcohol (90 per cent.)	1 "
Etheris sulphurici	2.5 "
Collodion	5 "

M.—Paint the warts daily.—VIDAL, in *L'Union Méd.*

DYSURIA IN WOMEN.

℞. Ext. belladon.	fʒj.
Ext. buchu	fʒij.
Lith. hydrangea (Lambert)	ʒiv.

M. Sig.—Teaspoonful four times daily.—*Med. Brief.*

MIGRAINE.

Ethoxycaffeine is recommended as palatable and well borne by the stomach in cases of migraine, according to the following formula:—

℞. Ethoxycaffeine	gr. v.
Salicylate of soda	gr. v.
Chlorhydrate of cocaine	gr. ij.
Flaxseed water	fʒij.
Syrup of maiden hair	ʒv.

M.—To be taken at one dose.—*Journal de Méd. de Paris.*

CHRONIC BRONCHITIS.

℞. Ammonii carb.	ʒss.
Tinct. scillæ	fʒiiss.
Papine.	ʒij.
Infus. senegæ	fʒv.

M. Sig.—One tablespoonful every four hours in water.—*Med. Brief.*

THERAPY OF ECZEMA.

Letzel recommends (Deutsche Med. Zeit. 100, 1887) the following lotion:—

℞. Olei papaveris	99.0
Coque c.	
Acidi salicyl. lævig.	1.0
in balneo usque ad perf. solut. refrigerat adde,	
Aquæ calcis	100.0
Zinci oxid. subtiliss	15.0
Sensim torendo.	

Sig.—Shake before using.

On account of its cheapness it can be used in dispensary practice, and if desired, other drugs may be substituted for the salicylic acid. —*Jour. of Cutaneous and Genito-Urinary Diseases.*

REMEDY FOR CATARRH IN THE HEAD.

℞. Roasted coffee	50 parts.
Menthol	2 "
Sugar	50 "

Triturate them together to a fine powder, and use as a snuff. This is highly recommended by Rabow (Deutsch Med. Wochensch.)—*Post-Graduate Journal.*

DYSPEPTIC DIARRHŒA.

A suitable combination, says Dr. F. P. McConnell, is:—

℞. Tincture cannabis indica	♏x–xx.
Subnitrate bismuth	gr. x.
Mucilage of acacia	ʒss.
Comp. spts. chloroform	♏xx.
Cinnamon or peppermint water	ʒj.

M.—Give before or after food, preferably after, especially when the dose is increased, since in this way unpleasant symptoms are obviated.

CATARRHAL PHARYNGITIS.

℞. Tr. aconite . . gtt. viij–xvj.
Chlorate potash . grs. xvj–xxx.
Aquæ, pure . . ℥j.

M. Sig.—Teaspoonful every two hours until the fever begins to go down, then every three to four hours.—*Medical Summary.*

CONSTIPATION IN CHILDREN.

Bouchut recommends:—

℞. Podophyllini . . . gr. j.
Alcoholis . . . . f℥iss.
Syrupi althaeæ . q.s. ad f℥iv.

M. Sig.—Dose, a half teaspoonful in tea a day.—*Revue Internationale des Sciences Médicales.*

The following recipe, from the Pharmacopœia of the London Hospital, is of occasional service:—

℞. Gallic acid. . . . gr. x.
Diluted sulphuric acid . ♏x.
Tincture of opium . . ♏v.
Distilled water . . ℥j.

M. for one dose.—*Can. Med. Record.*

CEREBRAL MENINGITIS.

℞. Potassium iodide . . . ℥ss.
Fld. ext. ergot . . . ℥iss.
Peppermint water . . ℥ij.
Distilled water . . q.s. ℥iv.

M. Sig.—One teaspoonful every four hours during the day.

℞. Potassii bromidi . . . ℥iij.
Chloral hydratis . . . ℥j.
Aquæ destillat. . . . ℥iv.

M. Sig.—One teaspoonful every hour until quiet and sleep are produced.—*Va. Medical Monthly.*

TOOTH POWDERS.

Amongst the most prominent tooth powders on the market at present are preparations that have been for some time in constant use; it is therefore reasonable to suppose that they fill the requirements of the public, and besides, they are constructed on a basis usually recognized as being efficient without being harmful. We will, therefore, give formulas constructed on substantially the same basis without intending them as imitations of the proprietary powders:—

Pearl Dentifrice.

℞. Precipitated chalk . . 4 parts.
Orris root . . . . 3 "
Diatomaceous earth . . 1 part.

This is a fair sample of a powder which cleanses simply by the mechanical action on the teeth. It is too hard a powder for frequent use, but if employed occasionally would serve a useful purpose. If wanted for constant use, omit the diatomaceous earth and increase the precipitated chalk from 4 to 5 parts. Used with a liquid dentifrice it would not be especially harmful.

Camphorated Tooth Powder.

℞. Precipitated chalk . 2½ parts.
Orris root . . . 1¼ "
Camphor . . . ¼ "

A simple camphorated chalk having stimulant effects on the gums as well as mechanical effect on the teeth.

Saponaceous Tooth Powder.

℞. Powdered Castile soap . 2 parts.
Precipitated chalk . . 1 part.
Magnesia carbonate . ½ "
Sugar . . . . ½ "
Oil of wintergreen . q.s.

This powder cleanses by mechanical and chemical properties.

Camphorated Saponaceous Dentifrice.

℞. Precipitated chalk . 3 parts.
Powdered Castile soap 2 "
Magnesia carbonate . 1 part.
Camphor . . . ¼ "
Oil of peppermint . 40 ♏. per lb.

This powder has three attributes: mechanical, chemical and stimulating effects. It would meet satisfactorily the demand made for a camphorated saponaceous tooth powder.

Peruvian Tooth Powder.

℞. Prepared chalk . 10 parts.
Pale cinchona bark (pulv.) . . . 3 "
Myrrh . . . . 1 part.
Cloves . . . . 1 "
Cassia bark . . 1 "
Oil of cloves . . 30 ♏. per lb.

This is a fair sample of a stimulating astringent tooth powder, but so far as we are aware there is no article met to any extent in pharmacy as a proprietary powder which has a composition approaching it. In the preceding five formulas we have illustrated the general composition of different varieties of tooth powders. They can, of course, be varied to almost any extent, but after all, the choice, except in perfuming, is very limited. In quality of perfume the public usually demand the heavier odors, and by common usage wintergreen, cloves or oil of rose are regarded as the odors best suited for tooth preparations. In putting them up for sale, small, wide-mouthed bottles with screw cap, each containing from 1 to 1½ ounces of powder, according to bulk, are the most common containers.—*Pharmaceutical Jour. and Transactions.*

THE circulation of THE MEDICAL BULLETIN is rapidly increasing.

THE
Medical Bulletin.

JOHN V. SHOEMAKER, A.M., M.D., Editor.
F. A. DAVIS, Att'y, Publisher.
A. L. HUMMEL, M.D., Business Manager.

Philadelphia, April, 1888.

THREE ABDOMINAL OPERATIONS IN ONE DAY.

DR. MONTGOMERY, Professor of Gynecology in the Medico-Chirurgical College, performed three abdominal operations at the Philadelphia Hospital, February 17, 1888.

The *first* was for retroflexion of the uterus, with prolapse of both ovaries. The design was to stitch ovaries and round ligaments to the anterior parietal peritoneum, but upon reaching the ovaries the right was found to be cystic, and was removed; its stump and the ovary of the opposite side were stitched to the parietal peritoneum. Duration of operation, 26 minutes.

The *second* was a small ovarian tumor in Douglas' pouch. Duration of operation, 23 minutes.

The *third* was a supposed sarcoma of left kidney. An incision was made through the right linea semilunous, and the external meso colon torn through to the capsule of the kidney. The condition was found to be pyonephrosis. The kidney was opened and nearly a quart of pus discharged. Passing a finger into the organ a large calculus was found, which was undoubtedly the cause of the trouble. The kidney was removed, but the patient died from shock in less than three hours.

SPRING LECTURES.

THE announcement of the various Medical Colleges for the Spring course of lectures appears this year sooner than usual. A large number of students, who receive good instruction from their preceptors, avail themselves of the opportunity and remain at college. The student is thus enabled to carefully pursue his studies, with much benefit, in the laboratories, dissecting and operating rooms, with the addition also of valuable clinical service in the hospitals. The specialties now taught so well in all thoroughly equipped schools can also receive the attention that they should from students. In place of four or five months of listening to lectures, the real, true student of to-day applies himself uninterruptedly, by the attention to the Spring and Fall lectures, ten months out of the year. Higher medical education by the lectures first referred to is being constantly advanced. The colleges, however, owe much to the practitioners (the preceptors) over our entire country who, by instructing their students to take advantage of the opportunities furnished, become better physicians.

A CONGRESS OF PHYSICIANS AND SURGEONS.

A PRELIMINARY programme has just been issued by a number of prominent physicians and surgeons representing the various special societies in the United States, and outlining a combination that has been formed and called "A Congress of Physicians and Surgeons." The meeting of this select organization has been called in Washington early next September, and its paramount object is for the purpose of calling attention to the prominent members of the profession who tried their utmost to pull to pieces the Ninth International Medical Congress. This seems to be the first object, and once it has been attained scientific work will follow next. Men who rank so high in their several departments should be above such small means of justifying a petty revenge. The few eminent members of the profession who are found in this Congress should leave their many wire-working friends, who have arranged and perfected this organization for their own ends, and should endeavor to foster conciliation and good feeling among the profession. The science of medicine and all its special departments are not for the few, but for the many. Each and every representative of the profession should be considered good enough to sit in the same hall of science and partake of all benefits that may come from all individual and collective efforts. If the common city and country practitioners are good enough to send their

students to the so-called leaders, as well as their cases in consultation, they should also have sufficient professional standing to admit them in any and all societies formed by the men calling themselves "The Congress of Physicians and Surgeons." Would that such were the case, but only read and reflect upon this stupendous, self-elect announcement of all the so-called leaders, and every one will perceive the same answer—"We, the leaders, cannot admit to this great scientific gathering any one who has been friendly to the Ninth International Medical Congress. Neither will we admit the ordinary city and country doctor, as our scientific papers and discussions cannot be appreciated by him." While we wish our confrères a most successful gathering of cultured physicians with fruitful results, we still maintain that a better example by those calling themselves leaders will conduce more rapidly to advance the Science of Medicine.

VACCINATION STATISTICS.

DR. SINCLAIR WHITE has published some valuable statistics concerning the small-pox epidemic in Sheffield, England, which lasted for nine months, and did not spend its force till December last. These facts bear chiefly on the subject of vaccination, and may be used as strong arguments against the anti-vaccinationists. According to Dr. White ninety per cent. of the people of Sheffield were vaccinated, and ten per cent. were unvaccinated. Among 2198 vaccinated persons who were attacked with small-pox only 97 deaths occurred, while out of 382 unvaccinated persons having small-pox, 157 died. The death-rate, then, among the vaccinated is only 4.4 per cent. as compared with 41.3 per cent. among the unvaccinated. This, too, includes many adult persons classed as vaccinated who had not been subjected to the vaccine disease since early childhood, and were therefore but imperfectly protected, if they can be said to have been protected at all. The significance of vaccination may be more plainly seen in the facts relating to children. Among 100,000 children in Sheffield under ten years of age, 95,000 were reported officially as vaccinated, and of these only 2 died, while 70 out of 5,000 unvaccinated died. These results are contrasted with just the contrary ones during the epidemic of 1857–58, when vaccination was not compulsory as it is now. Then, voluntary vaccination being the rule, it was the children who suffered most. In the report of that epidemic, there are recorded 179 deaths of children under 10 years of age, and only 11 in the whole balance of the population.

These figures are certainly suggestive, and may serve as a check to the rather rash disregard of a principle now relegated by would-be "progressive" men to the domain of old-fashioned medicine.

MEDICAL NEWS AND MISCELLANY.

DR. F. W. SHAIN, of Philadelphia, has located at 192 Grand street, Jersey City, N. J.

THE OTOLOGICAL CONGRESS will convene at Brussels from the 10th to the 15th of September next.

M. PASTEUR has resigned his position as Perpetual Secretary of the Paris Academy of Sciences on the ground of ill health. He has been elected Honorary Secretary.

DR. J. W. CHAMBERS has been lecturing on surgery in the College of Physicians and Surgeons this Winter, in place of Prof. Coskery, who has been suffering from aphonia.

SPONGY GUMS.—For the relief of congested, spongy or receded gums, use tannic acid, two drachms, glycerine one ounce; after the tannin is thoroughly digested apply on a pellet of cotton. —*Kansas City Medical Index.*

SULPHUR IN WHOOPING-COUGH.—A Norwegian physician asserts that whooping-cough may be readily cured, even in one night, by causing the patient to sleep in a room in which sulphur has been burned.—*Hospital Gazette.*

WANTED TWO PHYSICIANS.—Jones was feeling a little unwell.

"Run quick," he said to his servant, "and bring two doctors."

"Two doctors?"

"Yes, one to correct the mistakes of the other." —*Puck.*

THE BALTIMORE MEDICAL ASSOCIATION, which dates its foundation back to 1866, has elected as its officers for the present year: Dr. J. Lowrie Ingle, President; Drs. J. T. King and J. W. C. Cuddy, Vice-Presidents; Dr. J. T. Spicknall, Treasurer; and Drs. H. B. Gwyn and A. M. Belt, Secretaries.—*Med. News.*

To Relieve Toothache.—Dr. Popoff (Russkaya Meditsina) recommends a solution of potassium permanganate, 1 part to 500, as a remedy for toothache. A little of this solution is to be held in contact with the tooth for a few minutes, repeating the application every half hour.—*Drug. Circular and Chem. Gazette.*

Mamma (to nurse)—What is all that noise in the nursery, Marie? *Nurse*—Ze leetle dog, madame, has taken Mees Flossie's candy. *Mamma*—Well, take it from him at once, Marie, and give it back to Miss Flossie. Poor little Fido, he musn't eat so much candy; it might make him sick.

Off on Professional Duty.—"I want a surgeon at once," he said, as he hastily entered a hospital; "I've just shot three of my fingers off!"

"I'm sorry, my friend," replied the superintendent, "but you'll have to grin and bear it for a while. The surgeons are all over to the toboggan slide."—*Texas Siftings.*

Miss Clara (to *Featherly*, who is making an evening call)—Poor little Bobby swallowed a penny to-day, and we've all been so much worried about it.

Featherly (somewhat at a loss for words of encouragement)—Oh, I—er—I wouldn't worry, Miss Clara; a penny is not much.—*Harper's Bazar.*

A Dead Sure Thing.—At an antiquary's:—

"You mean to say that you have only a single specimen of this person's hand-writing?"

"Yes, and I will go so far as to add that there isn't another in existence."

"You think so?"

"Why, of course; he didn't know how to write."—*Judge.*

News comes from Hamburg of the death of Dr. Emil Lehmann, well known in Germany for his translations. He translated a large number of English books, some of considerable importance. Dr. Lehmann was a victim of blindness for the last twenty-three years of his life, and a great part of his work was done under the difficult conditions caused by this affliction.

Goes Without Saying.—*Omaha Man:* Will you please insert this death-notice, sir?

Editor (*glancing over notice*).—Had'nt the cause of death better be mentioned?

Omaha Man.—I hardly think so, sir. It would be going into unnecessary particulars to state that the deceased called Jim Bloodgo a liar.—*Omaha World.*

The Late Professor Flint.—The tablet erected to the memory of the late Austin Flint, M.D., LL.D., by the Alumni Association of the Bellevue Hospital Medical College, was formally unveiled at the Carnegie Laboratory, No. 328 East Twenty-sixth street, New York, on Saturday evening, March 10th. The presentation address was delivered by Dr. Leroy M. Yale.

Quinine in Jaundice.—Waugh called attention to the fact that jaundice with high fever and epigastric tenderness is usually of malarial origin, and requires very large doses of quinine. He gives from 20 to 40 grains, per rectum, in a concentrated and warm solution. The stomach is usually too sensitive to tolerate a dose large enough to accomplish the cure.—*Med. Times.*

It Lengthened His Days.—*Buck*—What's the matter with you to-night, Charlie? You look so awful glum.

Charlie—Matter enough. I went to my doctor yesterday and he said if I'd stop smoking it would lengthen my days.

Buck—Well, did you stop?

Charlie—Yes, and the doctor was right—this has been the longest day I ever lived.—*Medical Era.*

The Philadelphia Clinical Society held its annual meeting January 27, 1888, and elected officers, as follows:—President, Dr. Mary E. Allen; 1st Vice-President, Dr. Clara Marshall; 2d Vice-President, Dr. Marie B. Werner; Treasurer, Dr. L. Brewer Hall; Recording Secretary, Dr. Mary Willits; Reporting Secretary, Dr. Mary Willits; Corresponding Secretary, Dr. Emma Musson; Counsellors, Drs. Amy S. Barton, I. G. Heilman, A. Victoria Scott, Edward E. Montgomery and James B. Walker.

A Rushing Business.—*Druggist* (to customer)—There you are, sir; a 2-cent stamp. Can I do anything else for you, sir?

Customer—Well—er—would you cash a small check? Save me the trouble of going to the bank.

Druggist—With pleasure. Anything else, sir?

Customer—I believe I will put one of these almanacs in my pocket, and that is all, I think, this morning.

Druggist—Thanks. Won't you have a glass of soda water with me?—*N. Y. Sun.*

A Chinese Remedy for Croup.—The formula of Tcheng-Ke-Tang is as follows: "Take from an old wall seven big spider webs, two of which at least should contain living spiders. Mash them up together (the webs and spiders), and add to mass (or *mess*, we should say) about two scruples of alum dissolved in as little water as possible. Cook the whole over the fire until dry, and then increase the heat to incineration. The incinerated residue is powdered very fine and the powder is blown into the throat with a little bamboo cane. This is a sure cure." In short, the Chinese use burnt alum.—*St. Louis Medical and Surgical Journal.*

PASTEURISM IN POLAND. — Dr. Monin furnishes the following statistics concerning the number of preventive inoculations for rabies practiced in Warsaw by Dr. Bujwid, and the results obtained. From the beginning of 1887 to July 1st, 220 persons were inoculated; in 85 per cent. of the cases the bites were inflicted by animals proved to be suffering from rabies. In 15 per cent. of the cases this fact was not certified; thirty-five persons who were bitten were not inoculated, owing to the insignificant nature of the bites. Two of the patients inoculated died; the mortality was therefore 1.06 per cent. This proportion is much the same as that shown by the results of similar experiments at the Institute Pasteur.—*British Medical Journal.*

SULPHATE OF MAGNESIA FOR WARTS.—*Apropos* of recent statements as to the efficacy of sulphate of magnesia in the treatment of warts, I would like to mention the following case which recently came under my notice: A man consulted me respecting a growth of vegetations surrounding the glans penis, forming a huge mass, almost as large as a hen's egg. I prescribed the use of a powder of equal parts of salicylic acid, calomel and oleate of zinc, to be renewed night and morning. The case improved slowly, too slowly for the patient's satisfaction. I then ordered one grain of sulphate of magnesia every hour, in solution, in addition to the application of the powder already mentioned. The growths now commenced to disappear rapidly, and in less than three weeks there was not a vestige of them left. The patient states that they mysteriously "melted away." He used the magnesia regularly every hour of the day for the first week, but became more careless for the rest of the time.—DR. LOUIS LEWIS, in the *Medical and Surgical Reporter.*

AN OBJECTION TO THE USE OF SACCHARIN.—Dr. John Hedley states in the British Medical Journal:—I should like to call the attention of the profession to the singular effect which saccharin has had on a patient of mine.

In a case of glycosuria I had prohibited the use of sugar, and substituted saccharin, with apparently excellent results; but after about twelve or fifteen doses had been used, my patient began to feel so much nausea that he was obliged to leave off taking it. His mouth got to have an "abominably sweet taste always in it," and, without the addition of any sweetening material, everything he touched tasted of saccharin; indeed, so pronounced was this that his pipe, usually such a solace, had to be given up in disgust, on account of the smoke having such a sweet flavor.

This intensity of sweetness occurred on the fifth day after beginning the saccharin; and probably an explanation will be found in the fact that it passes unchanged through the system, and will, I am afraid, produce a sweet saliva, unless it is used with occasional intermissions.

ANTIPYRINE IN PHTHISIS.—Dr. M. Collins adds in the Medical Herald:—Antipyrine, in my hands, has proved of considerable value in relieving some of the distressing symptoms in phthisis. I have used this remarkable drug in about 25 cases of phthisis, at all stages, and give it to relieve the annoying headache and other nervous symptoms depending on a high temperature. The reduction of the temperature is, of course, the first thing aimed at, and with its reduction where the patient complains of headache, and sometimes pain, these last named symptoms also cease. I give the antipyrine when the temperature runs over 102, and when there is a periodic and regular rise I anticipate such rise by giving the drug one hour previously. Where there is this periodicity antipyrine nearly always prevents the rise and thereby affords the patient more rest and comfort. This use of antipyrine was particularly well marked in one case, a typical one, that of a young man, æt. 21, white, in the third stage of phthisis (cavity) well advanced, whose temperature rise occurred daily about 5 A. M. The thermometer registering as high as 104. He complained of insomnia and a distressing headache. He was ordered, as the temperature indicated, 10 to 15 grains of antipyrine one hour before the rise (4 A. M.) The result was invariably a prevention of the rise, and cessation of the headache, while the patient slept longer.

THE WILLIAM F. JENKS MEMORIAL PRIZE.—The First Triennial Prize, of Two Hundred and Fifty Dollars, under the Deed of Trust of Mrs. William F. Jenks, will be awarded to the author of the best essay on "The Diagnosis and Treatment of Extra-uterine Pregnancy." The conditions annexed by the founder of this prize are, that the "prize or award must always be for some subject connected with Obstetrics, or the Diseases of Women, or the Diseases of Children;" and that "the Trustees, under this deed for the time being, can in their discretion publish the successful essay, or any paper written upon any subject for which they may offer a reward, provided the income in their hands may in their judgment be sufficient for that purpose, and the essay or paper be considered by them worthy of publication. If published, the distribution of said essay shall be entirely under the control of said Trustees. In case they do not publish the said essay or paper, it shall be the property of the College of Physicians of Philadelphia." The prize is open for competition to the whole world, but the essay must be the production of a single person. The essay, which must be written in the English language, or if in foreign language,

accompanied by an English translation, should be sent to the College of Physicians of Philadelphia, Pennsylvania, U.S.A., addressed to Ellwood Wilson, M.D., Chairman of the William F. Jenks Prize Committee, before January 1, 1889. Each essay must be distinguished by a motto, and accompanied by a sealed envelope bearing the same motto and containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay. The Committee will return the unsuccessful essays if reclaimed by their respective writers, or their agents, within one year. The Committee reserves the right to make no award if no essay submitted is considered worthy of the prize.

Syphilitic Insanity.—Dr. D. F. Kinnier gives in the Journal of Cutaneous and Genito-Urinary Diseases the following treatment for a case of syphilitic insanity:—

The treatment adopted in this case was tonics, with mercury and iodide of potassium. The mercury when not given by the mouth was given by inunction or hypodermically. The inunction treatment was carried out faithfully, but did not seem to have the desired speedy effect wished for. The plan adopted was to take a piece of mercurial ointment, about the size of a pea, and rub it into the inside of the forearm, arms, chest, on the surface of the abdomen, on the thighs and legs, for about five minutes at a time. Thinking that a better result would be obtained by use of the hypodermic injections of mercury, that form of treatment was resorted to and produced a more ameliorating effect upon the disease for the time being. The form of mercury used was corrosive sublimate. In giving the injections I have prepared a solution containing one ounce of water and six grains of corrosive sublimate, and of this solution I begin by injecting five minims, or a sixteenth of a grain, and gradually increase the amount to one-eighth or tenth of a grain. Objections have been raised to this form of treatment on account of the injections producing pain, induration, inflammatory swellings and occasional abscesses. That these little difficulties are met with is certain, but they may be guarded against by due caution. In beginning the treatment of syphilis by hypodermic medication it is important that a proper syringe be used. The kind I prefer are those made of glass, which the mercury will not corrode, which it does do if metal syringes are used. A short needle will not answer for these injections, because the needle may not penetrate sufficiently deep into the integument, and hence the mercurial solution will not be taken up, since there are no absorbent vessels in the layer of the cuticle, and we need not be surprised if inflammation should set in. But this objection can be overcome by using a long needle and inserting it into the cellular tissue which is traversed by many absorbent vessels which readily take up the mercurial solution. In giving these injections I always begin with minute doses and gradually increase the amount to be injected until a full mercurial impression is obtained, and then care must be used to give only sufficient mercury to keep the system under a mild influence of the drug until the disease has disappeared. Great caution must be observed in treating syphilis by hypodermic injections of mercury, and we should regulate the amount given according to the idiosyncrasies of the patient. The parts I usually select for giving injections are the lateral regions of the back, especially the infra-scapular and sacral regions, as these are well supplied with subcutaneous cellular tissue, and rapid absorption takes place. My experience in the treatment of syphilis by this method is limited to a small number of cases, and the many objections which are raised against this mode of treatment have occurred to me, but by using great precaution with the syringe and always having it in a cleanly condition, I have overcome many of the objections and am much pleased with the results of this form of treatment.

Iodide of potassium was also given in gradually increasing doses, beginning with ten grains three times a day. This I consider to be the best method of giving this drug in syphilis of the nervous system. Iodide of potassium is quickly eliminated from the system, and hence the advisability of giving the drug in gradually increasing doses, so that the constitutional effects of the drug may be obtained. I prefer to give it after meals and largely diluted with water. When very large doses of iodide are to be taken, as, for instance, three or four drachms in twenty-four hours, I think it preferable to dissolve this amount in one-half pint of water, and allow small draughts to be taken at frequent intervals during the day.

Taken in this way, I am satisfied that good effects will be obtained, and there will be less liability of disturbing the stomach than if large doses were taken.

The Next Meeting of the Association of American Medical Editors.—The following programme has been arranged for the meeting at Cincinnati Monday evening preceding the meeting of the American Medical Association, May, 1888:—

Meeting called at 8 P. M.

Reading of minutes.

President's address, Dr. William Porter, of St. Louis.

Report of Committee on Organization, Dr. McMurtry, Chairman, Danville, Ky.

Election of officers for ensuing year.

Extraordinary business.

Questions for consideration:

1. Is the multiplicity of medical journals an advantage to the profession? To be discussed by Drs. Crothers, Hartford; Sim, Memphis; Wile, Conn.; Love, St. Louis; Culbertson, Cincinnati; Cushing, Boston; Coomes, Louisville; and Gray, Chicago.

2. How far do medical journals distributed by drug houses and manufacturers interfere with regular medical journalism? To be discussed by Drs. Reynolds, Louisville; Davis, Chicago; Shoemaker, Philadelphia; Bond, St. Louis; Connor, Detroit; Kiernan, Chicago; Thacker, Cincinnati; and Fulton, St. Paul.

Members are requested to limit their remarks to fifteen minutes, and if possible to ten. The place of meeting will be posted in all the hotels by the local committee.

Arrangements can be made at this meeting for a "press dinner" for another evening during the week, but it will be impossible to conclude the business of the Association and have the dinner the same evening.—*The Weekly Medical Review, March 10.*

THE AMERICAN MEDICAL ASSOCIATION.—The thirty-ninth annual session will be held in Cincinnati, Ohio, on Tuesday, Wednesday, Thursday and Friday, May 8, 9, 10 and 11, 1888, commencing on Tuesday at 11 A.M.

The delegates shall receive their appointment from permanently organized State Medical Societies, and such County and District Medical Societies as are recognized by representation in their respective State Societies, and from the Medical Department of the Army and Navy, and the Marine Hospital Service of the United States.

Each State, County and District Medical Society entitled to representation shall have the privilege of sending to the Association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number; provided, however, that the number of delegates for any particular State, territory, county, city or town shall not exceed the ratio of one in ten of the resident physicians who may have signed the Code of Ethics of the Association.

Secretaries of medical societies, as above designated, are earnestly requested to forward at once lists of their delegates.

Also, that the Permanent Secretary may be enabled to erase from the roll the names of those who have forfeited their membership, the secretaries are, by special resolution, requested to send him, annually, a corrected list of the membership of their respective societies.

The officers of Sections are as follows:

Practice of Medicine, Materia Medica and Physiology—Chairmanship vacant. Secretary, Dr. N. S. Davis, Jr., 65 Randolph Street, Chicago, Ill.

Obstetrics and Diseases and Women and Children—Chairman, Dr. Eli Van DeWarker, 45 Montgomery Street, Syracuse, N. Y.; Secretary, Dr. E. W. Cushing, 1 Hotel Pelham, Boston, Mass.

Surgery and Anatomy—Chairman, Dr. Donald McLean, 72 Lafayette Avenue, Detroit, Mich.; Secretary, Dr. B. A. Watson, 124 York Street, Jersey City, N. J.

State Medicine—Chairman, Dr. H. B. Baker, Lansing, Mich.; Secretary, Dr. S. T. Armstrong, U. S. M. Hospital Service.

Ophthalmology, Otology and Laryngology—Chairman, Dr. F. C. Hotz, 181 Clark Street, Chicago, Ill.; Secretary, Dr. Edward Jackson, 215 South 17th Street, Philadelphia, Pa.

Diseases of Children—Chairman, Dr. F. E. Waxham, 3448 Indiana Avenue, Chicago, Ill.; Secretary, Dr. W. B. Lawrence, Batesville, Ark.

Oral and Dental Surgery—Chairman, Dr. J. Taft, Cincinnati, Ohio; Secretary, Dr. E. S. Talbot, 125 State Street, Chicago, Ill.

Medical Jurisprudence—Chairman, Dr. E. M. Reid, 243 North Fremont Street, Baltimore, Md.; Secretary, Dr. C. B. Bell, Suffolk, Mass.

Dermatology and Syphilography—Chairman, Dr. E. D. Bulkley, 4 East 37th Street, N. Y.; Secretary, Dr. S. F. Dunlap, Danville, Ky.

A member desiring to read a paper before a Section should forward the paper, or its title and length (not to exceed twenty minutes in reading), to the Chairman of the Committee of Arrangements at least one month before the meeting.

Committee of Arrangements—W. W. Dawson, Cincinnati, Ohio, Chairman.

Permanent Secretary—William B. Atkinson, M.D., Philadelphia.

MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA.—The thirty-ninth annual meeting will be held in Philadelphia on Tuesday, Wednesday, Thursday and Friday, June 5th, 6th, 7th and 8th, 1888, commencing on Tuesday, June 5th, at 9 A. M.

Appointments for 1888.—(1) Address on Practice of Medicine, Dr. E. R. Mayer, of Wilkesbarre; (2) Address on Surgery, Dr. James McCann, of Pittsburgh; (3) Address on Obstetrics, Dr. Theophilus Parvin, of Philadelphia; (4) Address on Mental Disorders, Dr. Horatio C. Wood, of Philadelphia; (5) Address on Otology, Dr. B. A. Randall, of Philadelphia; (6) Address on Hygiene, Dr. Traill Green, of Easton.

To be Acted Upon.

Offered by Dr. S. Solis-Cohen, of Philadelphia:—"There shall annually be constituted, as the first item of business at the afternoon session

of the first day, a Nominating Committee, to consist of one member named by the majority vote of the delegation of each county, who shall report, as the first item of business in the afternoon session of the second day, a list of candidates for Officers and necessary Committees.

"In the Nominating Committee each member shall cast a number of votes equal to the number of delegates from the county in actual attendance upon the session."

Offered by Dr. A. Enfield, of Bedford:—"The time and place of meeting shall be determined by the Nominating Committee, and the sessions shall always begin at 9 A. M., and continue for four days; and the Committee of Arrangements shall adjust papers, etc., in accordance with this By-Law."

Offered by Dr. A. M. Pollock, of Pittsburgh:—"That the Censors of the appropriate district shall have power to determine whether a resident of one county shall be entitled to become a member of an adjacent County Society which may be more convenient for him to attend."

All applications to read papers at this session should be sent, not later than April 15th, to the Chairman of Committee of Arrangements, Dr. John H. Packard, 1926 Spruce Street, Philadelphia.

Secretaries of County Medical Societies are earnestly requested to forward at once complete lists of their Officers and Members, giving the post-office address of each.

Every delegate, before admission, shall present a certificate of delegation, signed by the President or Secretary of his County Society.

Every permanent member (not a delegate), before admission, shall present a certificate of good standing in his County Society.—*Extract from Constitution.*

Railroad facilities will be announced when obtained. All who desire Excursion Orders should notify the Permanent Secretary, stating which railroad must be used.

WM. B. ATKINSON, *Permanent Secretary.*

TESTS FOR NEW REMEDIES.—The following characters and tests for some articles of materia medica recently introduced have been drawn up and published by the Pharmacopœia Commission of the German Pharmaceutical Association:—

Antifebrinum (*Acetanilid*).—Colorless shining crystalline scales, without smell and with a faint burning taste, melting at 122° to 123° C., boiling at 295° C., and when ignited burning without residue. Acetanilid dissolves in 194 parts of cold water and in 18 parts of boiling water, in 3.5 parts of alcohol and freely in ether and in chloroform. The aqueous solution is neutral.

A solution prepared with hot water is reddened by ferric chloride. When heated with potash solution acetanilid gives off aromatic vapors.

0.1 gram of acetanilid boiled for one minute with 1 c.c. of hydrochloric acid forms a clear solution, in which, after the addition of 3 c.c. of water and 1 drop of liquefied carbolic acid, an onion-red turbidity is produced by chloride of lime solution (1 in 10), and is then colored indigo blue upon adding ammonia in excess.

A cold saturated aqueous solution when treated with ferric chloride should not change color.

Adeps Lanæ (*Lanolinum*).—The purified fat of sheep's-wool, mixed with water. A yellowish-white mass of the consistence of thick ointment, with a faint peculiar odor, melting at 40° C., insoluble in water, but capable of taking up several times its weight of water without losing its ointment-like character. With ether or chloroform it gives a turbid neutral solution. Heated upon a water-bath it remains clear while in a melted condition, but upon cooling forms a honey-yellow viscous unctuous mass, which is readily soluble in ether and in chloroform, but in alcohol, and even in hot absolute alcohol is only partially soluble. The chloroform solution of this anhydrous fat (1 in 50), placed over sulphuric acid, forms gradually a deep brown-red intermediate layer.

When ignited, lanolin burns with a luminous, very sooty flame, and upon incineration it leaves a barely perceptible ash (0.1 to 0.3 per cent.), which when moistened with water does not alter red litmus paper.

Lanolin, when heated in a water-bath, should not lose more than 30 per cent. of its weight. Heated with soda solution it should not give off ammonia. One drop of phenolphthalein solution, added to 2 grams of lanolin, dissolved in 10 c.c. of ether, should not show any change, but the solution should be strongly reddened upon the addition of one drop of normal potash solution.

Saccharinum (*Saccharin*).—White, partially micro-crystalline powder, without odor, having a remarkably sweet taste, perceptible in solution of 1 in 50,000, melting upon being heated in a glass tube with a development of brown color and evolution of vapor having a bitter-almond-like odor, and being when ignited without sensible residue. It forms with 400 parts of cold, or 28 parts of hot water, an acid solution; it is also soluble in 80 parts of alcohol, and soluble with difficulty in ether. It is readily taken up by caustic alkalies, which saturate it. The aqueous solution neutralized with alkali, but not the pure solution of saccharin, is precipitated brownish-yellow by ferric chloride; the precipitate is decomposed upon the addition of hydrochloric acid, with the separation of saccharin. Heated with several times its weight of sodium carbonate saccharin carbonizes with evolution of benzol vapor. The incineration residue, dissolved in water, and after filtration supersaturated with

nitric acid, gives upon addition of barium nitrate a white precipitate.

0.18 gram of saccharin, suspended in 5 c.c. of water, should dissolve upon the addition of 1 c.c. of normal potash solution to form a neutral liquid; this liquid, if heated to boiling after the addition of several c.c. of normal potash solution, should not become colored. Saccharin should not blacken if sulphuric acid be poured upon it; if the mixture be placed in boiling water for ten minutes there is an appearance of a faint brown color, but no blackening.

If saccharin be washed on a filter with several times its quantity of ether, and the ether mixed with ten times its quantity of water, ferric chloride should not produce in it either a precipitate or a violet color.

Salolum (*Salol*).—White crystalline powder, having a very weak aromatic odor and taste, melting at 42° C., and when ignited burning with a smoky flame and leaving no residue. Salol does not dissolve in cold water, and only slightly in hot water; it is soluble in ten parts of alcohol, one-third part of ether, abundantly in chloroform and readily in liquefied carbolic acid.

The alcoholic solution of salol is colored violet by ferric chloride. If salol be boiled with several times its quantity of soda solution it dissolves to a liquid which, upon being acidulated after cooling with hydrochloric acid, gives off the odor of phenol and yields a white precipitate, which, filtered out and washed, upon being shaken with hot water dissolves, the solution assuming a blue-violet color with ferric chloride.

Salol should not redden moistened litmus paper. When shaken with fifty times its quantity of water, it should give a filtrate which, upon the addition of one drop of ferric chloride is not colored violet, and is not immediately changed by silver nitrate or barium nitrate.—*London Pharmaceutical Journal and Transactions.*

THALLIN IN GONORRHŒA.—Dr. Goll, of Zurich (Korr. Bl. f. Schweizer Arzte, November, 1887), regards the salts of thallin, and especially the sulphate of thallin, as an effectual and but slightly irritating antidote to the gonococcus virus.

He has also employed the tartrate of thallin in one and two per cent. solution in recent cases of gonorrhœa without waiting for the inflammatory stage to pass entirely. It appeared to act well, first changing the purulent secretion into one of a milky or slimy nature, which in turn disappeared.

Still more active and beneficial was a two and two and a-half per cent. solution, although in some cases this caused some inflammatory symptoms.

In the chronic stage he employs a solution of from one to one and a-half per cent. as an irrigation with favorable results.

Dr. Kreis, also of Zurich, writes in the same journal that he was led by the observations of Schulz and Pisenti relating to the antiseptic nature of thallin to try its effects upon gonococcus cultures:—

1st. By bringing a solution of thallin into contact with fat cultures, and

2d. By inoculating media containing thallin with gonorrhœal pus.

In the first, two series of experiments were made, one with an acid and the other with a neutral solution. In all the trials no gonococci developed.

In the second experiment the medium prepared with thallin solutions (neutral and acid) were inoculated with cultures of gonococci and placed in the hot-air chamber; the result was that no gonococci developed, while a control experiment at the same time carried out in a medium free from thallin showed, after twenty-four hours, commencing development of typical gonococci. The strength of the thallin solutions used were from one-half to four per cent.—*Journal of Cutaneous and Genito-Urinary Diseases*, February, 1888.

PERILS OF HYPNOTISM—THE SUBJECT IS THE AUTOMATIC EXECUTOR OF AN UNPRINCIPLED WILL.—Two facts have now become patent to law and science:—

1. That, in the perceptions of the hypnotized subject, the visionary representations called forth by "suggestion" become real, existing actualities, the subject being, for the moment, the automatic executor of the will of the hypnotizer; and—

2. That the great majority of persons experimented upon is subject to hypnotic suggestion.

Thus Liébeault found only sixty subjects intractable out of the seven hundred he experimented upon; and Bernheim, out of ten hundred and fourteen subjects, failed with only twenty-six. The field for the natural-born *jadoo-wala* (sorcery-mongers) is vast indeed! Evil has acquired a play-ground on which it may now exercise its sway upon many a generation of unconscious victims. For crimes undreamt of in the waking state, and felonies of the blackest dye, are now invited and encouraged by the new "accursed science." The real perpetrators of these deeds of darkness may now remain forever hidden from the vengeance of human justice. The hand which executes the criminal suggestion is only that of an irresponsible automaton, whose memory preserves no trace of it, and who, moreover is a witness who can easily be disposed of by compulsory suicide—again under "suggestion. What better means than these could be offered to the fiends of passion and revenge—ever on the lookout to break the universal commandment: "Thou shalt not steal, nor murder, nor lust after thy neighbor's wife." Liébeault suggested to a young girl that she should poison herself with

prussic acid, and she swallowed the supposed drug without a moment's hesitation; Dr. Liégois suggested to a young woman that she owed him five thousand francs, and the subject forthwith signed a check for that amount. Bernheim suggested to another hysterical girl a long and complicated vision with regard to a criminal case. Two days after, although the hypnotizer had not exercised any new pressure upon her in the interim, she repeated distinctly the whole suggested story to a lawyer sent to her for the purpose. Had her evidence been seriously accepted it would have brought the accused to the guillotine.

These cases present two dark and terrible aspects. From the moral standpoint, such processes and suggestions leave an indellible stain upon the purity of the subject's nature. Even the innocent mind of a ten-year-old child can thus be inoculated with vice, the poison-germ of which will develop in his subsequent life.—MME. BLAVATSKY, in "*Lucifer*."

A CASE OF ACUTE TRAUMATIC TETANUS, SUCCESSFULLY TREATED BY LARGE DOSES OF SALICIN AND BROMIDE OF POTASSIUM.—Notes of the following case have been sent me by my old pupil, Mr. E. Thurlow Prior, of Loddon, Norfolk. I quite agree with him in thinking that the case is one of interest, and that the treatment merits a further trial.

A. M., aged 26, a young man of rather intemperate habits, cut his arm severely on June 30, 1887, by thrusting his hand through a window. The wound appeared to be making good progress until July 15, when he complained of pain in the epigastrium. In the course of the day his face began to stiffen, and there were twitches of the muscles of the face and of the back and legs. These grew worse until July 19, when Mr. Prior was first called to see the patient. At this time the risus sardonicus was well marked, and spasm was elicited by speaking sharply or loudly to him. He was placed in a warm room, which was fitted with carpets and curtains to deaden sound, and full doses of chloral hydrate and bromide of potassium were administered. But he grew worse; the breathing became labored; the pulse very rapid. On July 22 he appeared to be actually dying; the respirations and pulse could not be counted, and spasms recurred with extreme rapidity.

At 1 P.M. a draught was given of salicin gr. xx, potassium bromide gr. xx, every two hours. At 5 P.M. the spasms occurred only at intervals of ten minutes, the pulse was stronger and numbered 120, and severe perspirations had set in. On the following morning, July 23d, the intervals between the spasms had increased to twenty minutes; he breathed easily, and the pulse was still stronger and less rapid. The draught was now ordered to be taken every four hours. The improvement continued during the next two or three days, but several days elapsed before he was free from pain in the epigastrium, and for nearly a fortnight it was necessary to draw off his urine. At the end of six weeks he was convalescent. The only trouble which remains is the stiffness of the muscles of the upper extremity, due to the direct effect of the injury.

The rapidity with which improvement followed the administration of salicin and bromide of potassium leaves scarcely a doubt in the mind that the change in the condition of the patient must be attributed to the action of the medicines. It is, of course, difficult to assign to each drug its actual share in the cure. The improvement was marked by the occurrence of a profuse sweat, and this had probably something (perhaps much) to do with the recovery of the patient. The influence of the salicin was, perhaps, exerted on the vaso-motor centre, and its action as a germicide must not be left out of the account. It is to be observed that the case was one of acute tetanus, but not of the most acute variety, for the patient was not in imminent peril until the eighth day of the disease.—HENRY T. BUTLIN, in the *British Med. Jour.*, January 14, 1888.

HAT-BANDS A CAUSE OF HEADACHE.—A physician of Philadelphia analyzed a black japanned band worn by a patient suffering from headache, and found it contained three grains of one of the lead salts. From this case he concludes that many headaches are often due to the absorption of the lead in the hat-band.

OPIUM.—Florida promises to become a large producer of opium. The poppy grows there very readily, and larger than anywhere else in the United States. Sixteen plants will produce an ounce of opium, and an acre should give a profit of one thousand dollars. As the plants will thrive among trees, the land on which are young and non-bearing orange orchards can be utilized while the trees are reaching maturity.

A QUESTION THAT SHOULD BE ANSWERED.—Just look here! Two men yesterday, as reported elsewhere, went through a manhole at Broadway and Thirty-second Street to do some work.

The hole got stopped up for a little while, and when the men were taken out one of them gasped and was dead and the other was unconscious.

The soil under our feet is so saturated with gas—both illuminating and sewer-gas—that if a man breathes it for a few minutes he becomes a subject for the coroner.

Query: What proportion of these two deadly poisons escapes into the air and increases the death-rate of this city?

That is worth thinking about, isn't it?—*New York Herald*, January 22.

BOOK REVIEWS.

Chemical Analysis of Healthy and Diseased Urine, Qualitative and Quantitative. By T. C. VAN NUYS, Professor of Chemistry, Indiana University. With thirty-nine wood engravings. Cloth, large 8vo., 187 Pages. Philadelphia: P. Blakiston, Son & Co., 1888. Price $2.00.

Although not an exhaustive treatise on urinary analysis, the work of Professor Van Nüys presents evidences of the greatest care in statement, arrangement and detail. As a guide to the physician it is very complete, and will be found useful by reason of the simplicity of the methods in both quantitative and qualitative analysis. We quote from the preface, "Simple qualitative tests are given in full, and the rationale of chemical processes fully explained, and to meet the requirements of students somewhat familiar with laboratory work, nearly all the methods employed in quantitative estimations are given in full:— . . . The most important facts, as regards laboratory work, have been incorporated, that they may be of some assistance to those who have no complete treatise at hand.

For several reasons we bespeak for this work an extended circulation: 1st, it is a book conveying reliable and the latest information on the subject; 2d. the methods advised are convenient and practical, and are as well calculated to serve the general practitioner as the specialist; 3d, there is a growing demand for knowledge of this nature, because of the necessity for exact chemical data in determining the etiology of diseased conditions and the indications for treatment. It is no exaggeration to say that Professor Van Nüys has fully covered the ground.

A single criticism might be added, by way of suggesting that future editions should contain also the English equivalents in addition to the figures of the metric system, and if the reviewer were disposed to be hypercritical, the orthography of albumen would receive attention.

Ledger of Monthly Balance and Index of Accounts. Philadelphia: The Medical World, 1520 Chestnut Street.

For physicians who desire to keep *well posted* as to the names of patients and accounts due from month to month, nothing could be more complete and convenient than the "Ledger of Monthly Balance, and Index of Accounts," published by the Medical World, 1520 Chestnut Street, Philadelphia. It is substantially a vest-pocket remembrancer, and undoubtedly will save many practitioners hundreds of dollars and much valuable time.

Contributions to the Study of the Heart and Lungs. By JAMES R. LEAMING, M.D., Emeritus Professor of Diseases of the Chest and Physical Diagnosis in the New York Polyclinic, and President of the Faculty, etc. Cloth, 8vo., pp. 300. New York: E. B. Treat, 1887. Price, $2.75.

Upon receipt of this volume, which is a collection of articles published from time to time in different medical journals, the reviewer was attracted first to the paper on cardiac murmurs, which proved to be a most interesting and valuable contribution. The essay is in the nature of an argument for the support of certain claims which the author regards as novel, and were met by hostile criticism when first anounced, although later on adopted by writers and teachers without acknowledgment. In this respect it becomes a particularly valuable paper, and from the fact that it also indicates the advances made by the author since its early publication, its reproduction now in the series known as "Medical Classics" is most appropriate.

When we compare the views held by Professor Leaming with the teachings of the late Professor Flint, a marked contrast is observed, although both are liberal in supplying proofs confirmatory of their respective opinions. Professor Leaming, with his elegant diction, his earnestness, rising frequently to the point of eloquence in well-rounded sentences, does not suffer by comparison with Professor Flint in his terse statements, his positive assertions based on clinical and experimental observations, and an unswerving devotion to the principles and precepts guarded for more that a generation with jealous care. The former appears in the *rôle* of an advocate for certain beliefs, although his argument occasionally rests on premises that are not without fault; the latter, as an impartial judge taking cognizance of every important factor in the testimony, clinches his instructions from time to time by reference to precedents of his own making.

Space forbids more extended reference, but we do not hesitate to say that no conscientious physician can read these papers without great benefit. The articles on respiratory murmurs and plastic exudation within the pleura are equally valuable studies, and their investigation on the part of the general practitioner will mark an important era in the study and treatment of disease.

The work is divided into three sections, the first part being devoted to papers on the lungs and pleura, the second to the heart, and part three to papers on the therapeutics of chloride of ammonium, mercury, and thuja occidentalis. A convenient index is added.

COMMERCIAL NEWS.

The Disinfectant of the Future.

The *New York Medical Journal* says:—

In a recent conversation, Professor Alfred L. Loomis remarked that chloride of zinc had maintained its long-established reputation as a disinfectant, as was shown in Mignel's classification. Sulphurous acid and chlorine were powerful germicides, beyond question, but their every-day use was impracticable, and the bichloride of mercury, although it might be the most potent of all the agents that were chiefly talked about, was hardly to be considered safe for domestic use. But the preparation known as "Platt's Chlorides" (a solution of the chlorides of zinc, lead, calcium and aluminium), which he had made use of freely for the past five years, both in his own house and among his patients, he considered by far the best for all the sanitary requirements of the household.

Observations Upon the Lactucarium of Auvergne; or, the Milky Juice of Lactuca. By H. Aubergier, Honorary Dean of the Faculty of Sciences, Paris, &c.

A concise treatise on the therapeutical history and cultivation of the plant Lactuca, together with its medicinal uses, and a mention of its recognition by the French Academy of Medicine and its popularity with the profession in France. We cite the following interesting data:—

Hippocrates prescribed the plant as a simple aliment. Celsus used it in phthisis. Galen took it himself for insomnia. Dr. Coxe, of Philadelphia, first experimented with the juice and named it Lactucarium. His experiments were followed by those of Drs. Bidault in France, and Anderson and Scudamore in England, all of whom were enthusiastic in recommending it as a substitute for opium, it possessing all the calmative and sedative properties of opium without its narcotic disadvantages, it not producing obstinate constipation, anorexia or cerebral congestion.

It remained, however, for Mr. Aubergier to so cultivate the plant as to transfer it from the field of medicinal curiosities to that of practical therapeutics, for which service he was awarded a prize of two thousand francs, numerous gold medals, and many honorable mentions.

Aubergier's Syrup of Lactucarium is imported by E. Fougera & Co., of 30 North William Street, New York City, who will send *gratis* a copy of this interesting monograph to any of our readers applying for it.

The Efficacy of Coca Erythroxylon.

This is the title of a tastily printed volume issued by Mariani & Co., 127 Fifth Avenue, New York City, the importers of the celebrated "Vin Mariani" and other coca preparations of similar name.

It is handsomely bound in cloth and contains many valuable suggestions as to the use of coca from the pens of eminent authorities in this country and abroad, together with a quite ponderous list of eminent medical gentlemen who are constantly prescribing the coca preparations of Mariani & Co.

Aside from its commercial feature it possesses quite a few interesting therapeutic hints.

It will be sent without cost, postage paid, to any of our readers who name this journal in their communication.

A Philadelphia Depot.

The California Vintage Co., of New York City, who make a specialty of providing the profession with native wines and brandies of absolute purity have established a depot for the convenience of their Philadelphia customers with Messrs. Showell & Fryer, of Market and Juniper Streets.

This Company is best known to our readers in connection with their justly celebrated Royal Tokay wine which is simply the juice of the grape, properly treated without deleterious flavors, and is equal in its nutritious properties to Tokay imported from Hungary. The native wine is sold, too, at just half the cost of the imported article.

Antiseptic Disks of Corrosive Sublimate.

Dr. Charles Meigs Wilson, in speaking of a compressed tablet of corrosive sublimate, says:—

"To those medical men who desire to use this, the safest and best antiseptic agent, the tablets (disks) will prove of great use; they save the carrying about of bulky solutions; they make a solution which is mathematically correct as to its strength; they eliminate an element of danger, because the physician can carry the tablets about with him, making and using the solution when required, and throwing the unused portion away, thus avoiding the necessity of leaving a dangerous poison in the hands of irresponsible and ignorant people, or the necessity of bringing his solution at each visit; they will also be of use as a means of preparing disinfectant solutions, as a large amount of disinfecting material can be obtained in this way in a compact form."

They are made by Sharp and Dohme, of Baltimore, Md., the manufacturing chemists so well known to our readers because of their marvelously soluble hypodermic tablets.

They will send a sample of these Antiseptic Disks to any physician applying for them and mentioning this journal.